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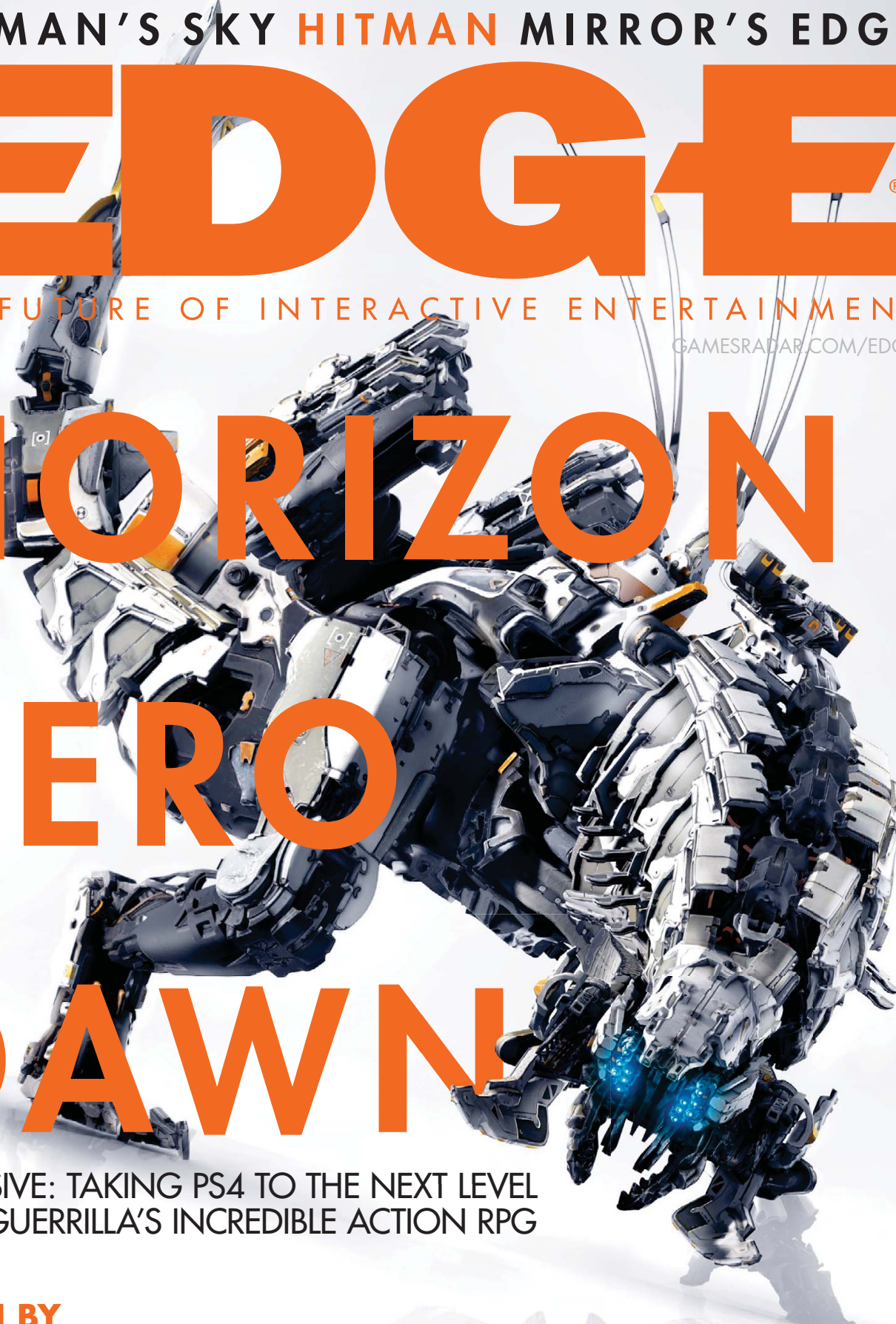
**DEATH BY
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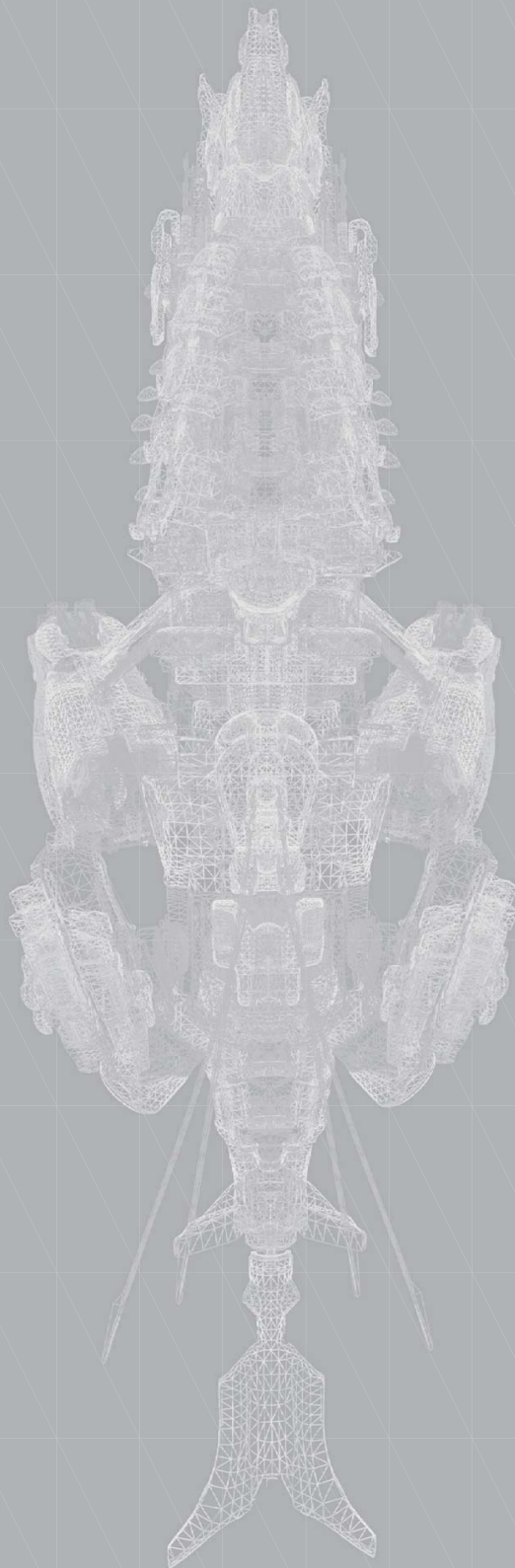
TALES OF EXTREME
VIRTUAL OBSESSION

#283

SEPTEMBER 2015

**INSIDE JAPAN'S
INDIE UPRISING**





Would Mario's moustache survive a 2015 focus test?

"For *Viewtiful Joe*, we brought in some kids to a focus test and asked them, 'What do you think of the characters?' And all the kids said, 'Oh, his head's too big,' or 'Silvia's annoying – I just want to kill her.' They were just trashing the game, so I just got pissed off and said I'm not changing anything." PlatinumGames' intractable **Hideki Kamiya** there, revealing his distinctive approach to player feedback. That was nearly ten years ago, but we're talking about a designer who uses Twitter's block function the way other people play Whac-A-Mole, so it's unlikely that he's working on the forthcoming *Scalebound* with a more open attitude. Similarly, it's hard to imagine that Hideo Kojima is putting anything other than himself into *Metal Gear Solid V* – especially when you see his name against the roles of director, producer, writer and designer in the game's credits sequence. But these attitudes are on the wane. Today, shutting players out increasingly feels like the exception rather than the rule – and the implications run deep.

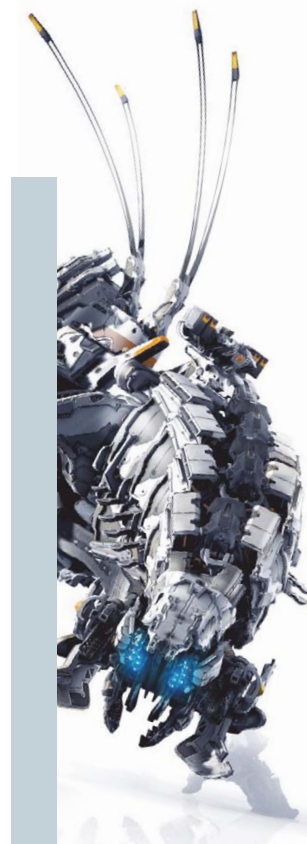
Knowing when to listen to players, how to do so, and what to do with your findings have become fundamental concerns for studios working in all genres. In *Critical Mass*, we look at the tangled issue of how modern games are being shaped by communities as well as their creators.

A sense of open-mindedness seems to be extending internally within development studios, too, as illustrated by this month's cover game. When it made the decision to consider something new rather than continuing to iterate on its 11-year-old *Killzone* template, Guerrilla Games invited every one of its employees, not only those with the word 'designer' in their official job titles, to contribute game ideas. In our lead feature, we discover why it chose the victorious submission and pulled the trigger on *Horizon: Zero Dawn*, a game born from an unconventional source.

Not everyone will approve of shaking up old conventions like this, of course. "To try to please fans, you can do EVERYTHING," Kamiya once pronounced to the world via Twitter. "Great theory. Totally against mine."



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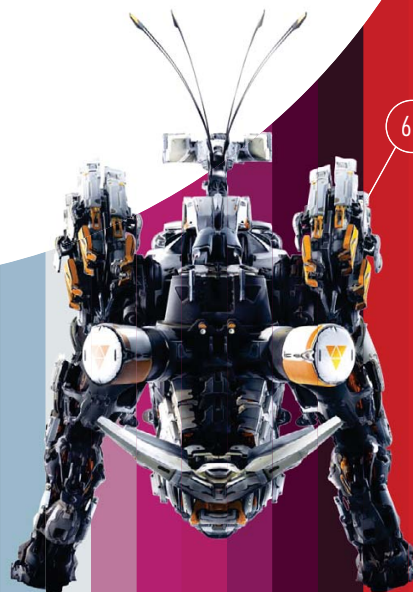
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Independence day

Amid a faltering mainstream industry, Kyoto-based indie game festival **BitSummit** has its best year ever

The phrase has been repeated enough that it's now a cliché, but Akihabara isn't what it used to be. While many in the west still perhaps imagine it as a honeypot for Japanese games, a terrible sense of ennui can wash over a visitor when they step out of the station. Every arcade's UFO machines are full of only anime idol figures. Every corner is choked with maids touting their cafe with an aggression that outpaces what you'd see in even Kabukicho. And the places you find – dingy retro arcades, even landmarks like Super Potato – feel like mausoleums. Places lamenting something that feels like it's been lost forever.

Yet, after a couple of hours on the Shinkansen, hope is found in Kyoto for two days a year, in the form of BitSummit.

Kyoto might not seem like the right place for it – after all, it's a relaxed city steeped in Japan's past through its concentration of Shinto shrines. But it's here that Japan's independent scene can be found. The base of the likes of Q-Games, 17bit and more, it's the Toronto to Tokyo's New York, or Austin to Los Angeles – a pocket of indie creativity in an unexpected place.

Indeed, it's Q-Games veterans that kicked off the first BitSummit, with one-time creative director **James Mielke** pushing against both media ignorance and local scepticism in his quest to raise global prominence of the Japanese indie scene.

"I always really thought that the indie scene owed a lot to creators like Daisuke Amaya [*Cave Story*]," he tells us. "But when I started to explore why Japanese indies weren't getting respect, I would ask the media and they'd say things like, 'Oh, we don't really know about the Japanese scene'. I took this to Dylan [Cuthbert, founder of Q-Games] and

said, 'You know what, as one of the more prominent Japanese developers, we have the cultural cachet to create an event that people take seriously.'

"I knew we'd be greeted with scepticism from other Japanese developers, because the industry was very insular, and when we started reaching out to people we'd hear, 'Why should I care? What is this going to do for me?' But we started reaching out to developers and media who were friends, then took that to sponsors, then in turn we showed the media and sponsors to other developers and said, 'These are the people who are going to be playing your games, and it's going to be great for the industry.'"

And it's worked. Reaching 5,000 attendees and with a line that stretches the length of Kyoto's Miyako Messe convention centre before opening, BitSummit 2015 sees booths from Sony, Microsoft, Oculus and even a large contingent of western indies in the form of an Indie Megabooth. But it's the Japanese developers that impress in their new, strident and genuinely personal projects, often debuting at BitSummit.

Take **Yoshiro Kimura** (*Little King's Story*, *Chulip*), whose BitSummit reveal *Brave Yamada-kun* is the strange tale of a depressed game developer who loses his grip on reality while trying to make his dream retro RPG project in his spare time.

"A long, long time ago I worked at Square, but unlike [protagonist] Yamada I've been independent for a long time," Kimura says. "The climate here in Japan isn't so conducive overall to independent developers. But thanks to events like this

I feel like I've been given additional chances to realise my own dreams as a developer. Despite the harsh times, this event reminds me it's OK to make the game I really want to make, despite the pressure I feel around me."

Other developers are more pessimistic. **Nanmo** is the developer of *Torquel*, a unique "two bar extending platform game" with a *Jet Set Willy*-esque hero (he swears the resemblance is coincidental). He quit his job at Sega to work on his game after hitting upon the idea while playing with a physics engine.

"Just considering the amount of money it cost to come here [from Tokyo], I don't know if I'll ever see that back," he says. "I'm happy to be making something I truly want to be making. But I have to worry about having enough money to do that – now I have another full-time job, and I'm trying to see this more like a hobby. However, it's

possible in the long term BitSummit will offer some reward."

While there are some ways for developers in Japan to gain access to tax breaks and grants, this kind of support remains largely unexplored. "I've made some attempts to get some money that way," Nanmo laments, "but it's not been successful. While there are some organisations that can help, when it comes to big amounts, you need to be a big company."

Despite these challenges and, in Nanmo's case, attempts to talk themselves down as mere hobbyists, most Japanese indie developers do now see themselves as distinctly separate from 'doujinsoft' (or amateur) game makers. ►



"Despite the harsh times, this event reminds me that it's OK to make the game I really want to make"



Sony Worldwide Studios president Shuhei Yoshida takes to the BitSummit podium to deliver advice on how Japanese indies can grow the domestic scene. One method? Make novel VR games



CLOCKWISE FROM LEFT The attention-grabbing booth samurai for *Bushido Ride HD*; BitSummit founder and Shinra Technologies comms director James Mielke addresses the audience; it wouldn't be a gaming event in 2015 without Oculus Rift

Mielke argues that it's the exposure to the wider indie universe over the past few years that has opened up Japanese indies to the possibilities in front of them.

"Japanese indies were once satisfied with going to events such as Comiket where they'd print up 500 copies of their game, without realising there were platforms like Steam," he says. "We don't accept doujin games and developers don't want to associate themselves with the term as they see them as amateur games, lifting sprites from commercial games or featuring adult content. They're trying to offer a higher level of quality than that."

It's something **Takaaki Ichijo**, developer of the *Silent Hill*-inspired *Back In 1995*, agrees with. "I saw myself being a doujin maker, the kind that would be at Comiket," he says. "But now I know that wouldn't be a good idea. People who go to those events value a certain kind of style and content, and I don't think they'd be interested in this kind of game."

His game's style caused some confusion when it was announced in April, with some outlets reporting that the game was developed in the west.

"When you think of typical Japanese games you think of cutesy girls, so I suppose I'm in a minority [working] against that stereotype," he says. "But us indies are on the rise. The amount of people who came [to BitSummit]

exceeded my expectations, and this was the perfect opportunity to show that this is a Japanese game."

There's inherent tension in being a Japanese indie, demonstrated by Ichijo's experience: are you creating games for the Japanese audience, or a global one? For many, it's not clear cut. A developer such as Pygmy Studio shows off *Bokosuka Wars 2*, a sequel to an (obscure in the west) Famicom simulation RPG from 32 years ago that's purely for the Japanese audience. Other developers hold that the Japanese audience, in unspecified terms, is just different from the rest of the world. Even western-influenced developers based in Japan, such as Australian **Matt Fielding**, have to take this into consideration.

"I'm the only developer [on action adventure *Exile's End*], but through [publisher] Marvelous I've managed to get help from Keiji Yamagishi, the original composer of *Ninja Gaiden*, to do all the music," he says. "And I've got cutscenes and some of the in-game art done by a veteran of the 16bit era in Japan too – someone who worked on an unreleased *Ninja Gaiden* for the Mega Drive."

"We're doing a Japanese version on release, and I'm hoping it's popular in Japan. The influences for me are

maybe a little bit different than they're used to here, but thanks to the artwork and music being more familiar, I hope it will have the right level of appeal."

The attendees at BitSummit – adults, children and families, few if any who seem to fit otaku stereotypes – remain blissfully unaware of these subtle plays for their affections and respond with glee to the games on offer universally. They even take to the Indie Megabooth, where

it's not just flashy draws such as *Crypt Of The NecroDancer* that attract the crowds, but other offerings such as *Sentris* and *Videoball* that remain busy all day.

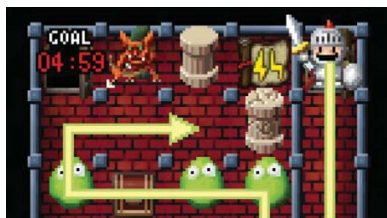
The audience is there in Japan for indie games, be they western-styled or not.

The question only remains if the momentum of events such as BitSummit can be maintained.

"The Japanese indie community is getting healthier and healthier," Mielke says. "Partly because of what we've done, and partly because of other indie events that have risen up. The triple-A industry [here] has seen a very, very steep decline, so it's [in indies] that you can see some of the new lifeblood."

"I've always maintained that the next Miyamoto is going to come out of Japan's indie games scene. It's here that the real creativity can be found." ■

"The triple-A industry has seen a very steep decline. It's here that you can see some of the new lifeblood"



BRAVE YAMADA-KUN

Publisher/developer Onion Games

Format Android, iOS **Release** TBA

Brave Yamada-Kun isn't just a gorgeous meta-story about depressed game designers, it's also a clever twist on path-drawing logic puzzles. Choose Yamada's path through the dungeon – trying to visit every space without being able to go back on yourself – and watch him succeed or fail based on your decisions. A glorious portable puzzler.



DARUMA SOUL

Publisher/developer Tengu Boys

Format iOS **Release** Autumn

Modern pixel graphics draw the player into this genuinely odd scrolling-shooter experience where you play as a ninja throwing daruma – traditional handmade Japanese wishing dolls – “to beat the evils” in a small town where the bullets fly around easily. Think *Pocky & Rocky* (AKA *Kiki KaiKai*), but even cuter – and a little bit stranger.



MUSE

Publisher/developer Pygmy Studio

Format PS4, Vita **Release** TBA

Baiyon's (*PixelJunk Eden*, *PixelJunk 4am*) first game as creative director, *MUSE: Together Is The New Alone*, is a “love adventure” heavily inspired by the *Mother* series. A boy journeys to wake a sleeping girl, along the way finding notes and paintings she's created. Baiyon's watercolour paintings mingle with pixel-art – and somehow it works.



BAD SMELL QUEUE

Publisher/developer Xionchannel Software

Format Android, iOS **Release** TBA

The latest game from the designer of fan-favourite score-attack games *HungryMaster* and *ElectroMaster*, *Bad Smell Queue* is a more accessible take on the risk-reward gaming mechanic – well, so long as you consider feeding a skunk until its explosive guffs can kill enough enemies to be accessible, that is.



DRUNK ROOM

Publisher Chogetsuku **Developer** Cygames

Format PC (Oculus Rift) **Release** TBA

‘Escape the room’ has become a bit of a played-out genre, but taken into virtual reality – and casting you in the role of a drunk groom on the morning of his wedding, desperately trying to get to the big occasion on time – means *Drunk Room*, based on the cult mobile hit, feels like something strange and special.



EXILE'S END

Publisher/developer Magnetic Realms

Format PC **Release** August

A game developed in Japan by an Australian seems on the surface like a decidedly unlikely source from which to see an heir to the Bitmap Brothers style emerge. Nevertheless, *Exile's End* prods at the same particular part of the brain as *Gods* did all those years ago. There's some satisfyingly crunchy combat and exploration play to be had, too.

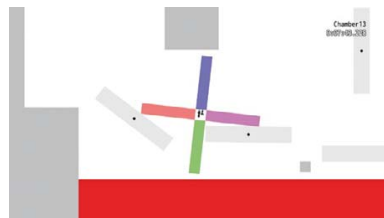


BACK IN 1995

Publisher/developer Throw The Warped Code Out

Format PC/TBA **Release** TBA

Somehow managing to create a low-res, flickery and clashy polygon experience halfway between *Alone In The Dark* and *Silent Hill* in Unity, *Back in 1995* promises to be more than just a retro throwback, with a story perversely claiming to make the player “question why they're playing a game like this in 2015”.



TORQUEL

Publisher/developer FullPowerSideAttack

Format PC, PS4, Vita **Release** Out now (Japan)

It doesn't initially promise much, but *Torquel's* unique control scheme – which sees you move your hero by extending ‘arms’ from the box he happens to be contained in – makes for a physics puzzle that's surprising and often hilarious. A straightforwardly presented effort that challenges both your dexterity and your intelligence.



GASSY MOB

Publisher/developer Flee Punk

Format iOS **Release** September

Farts are back in this year, apparently, with this “fantastic brutal gas arcade” game clearly inspired by Keita Takahashi's style. You simply run around breaking wind on people, while trying to avoid the killjoy police. An iOS title, control in *Gassy Mob* is a breeze: move your character with your left thumb, and tap the screen with another digit to let one rip.

Harvey and Samyn seem almost relieved to be out of the game industry, and now plan to explore other artforms. They haven't entirely ruled out a return to development, though they are adamant it won't be in a commercial capacity

Paolo della Corte



A sting in the Tale

After more than a decade of challenging conventions, **Tale Of Tales** calls time on commercial game development

Tale Of Tales greeted the end of its 12 years as a game developer with typical self-effacing humour. Belgian duo **Auriea Harvey** and **Michaël Samyn** announced on their studio's blog that they would no longer be making games – at least not commercially. “After the barrage of sad tales about depression caused by indies turning into millionaires overnight,” the post read, “allow us to raise your spirits with a story about the liberating and energising effects of complete commercial failure.”

The post outlined, with candour, the reasons behind their decision, which were chiefly financial. The pair's most recent game, *Sunset*, was an attempt at mass communication, born of a desire to connect with a wider audience. It didn't work. Despite many positive reviews – including our own in **E281** – and a successful crowdfunding campaign, not to mention plentiful online coverage, Tale Of Tales reported that the game had sold barely more than 4,000 copies. More disappointing still was the revelation that the figure included the copies for the game's Kickstarter backers, and also factored in units shifted after the price was halved in a Steam sale.

Given the circumstances, we find Harvey and Samyn in remarkably philosophical mood on a warm July afternoon, happy to look back and discuss their studio's history with a rare frankness. They're honest about what they perceive to be their own shortcomings as well as the failings of an industry that has proven it is unable to sustain them and their work any longer.

The studio's journey has been a consistently challenging one, which the two concede can be attributed in part to

ART OF GOLD
Back in 2002, Harvey and Samyn lobbied hard for games to be accepted by the Belgian Ministry Of Culture as cultural productions. “We presented our first game prototypes, and explained what we were trying to do and how it differed from what they thought games were,” Harvey says. The pair's argument was convincing enough to earn them their first arts funding, though a decade or so later a cruel twist of fate only rubs in how attitudes to games-as-culture have changed. While there's a dedicated fund for games now, Samyn explains, the criteria for funding has changed. “Our games are not game-like enough!” he laughs.



a stubborn unwillingness to compromise their ideologies. As electronic artists under the moniker Entropy8Zuper!, Harvey and Samyn regarded videogames as a potential new outlet for experimentation. “We were interested in electronic art, because you had a direct connection with your audience and there was no middleman,” Harvey says. “In [games], of course, there were lots of middlemen, but we didn't know that at first. We just figured we'd make a PlayStation game that was delivered on a disc.”

After a series of failures, the pair had no alternative but to become independent developers, and began to explore other ways to fund their work. Their first project under the Tale Of Tales name, still-functional MMOG *The Endless Forest*, was a commission from the Musée D'Art Moderne Grand-Duc Jean in Luxembourg, which offered enough funding to make a prototype. Further development was subsidised through money earned from the pair's client work as a digital design team, but a Belgian arts festival provided extra funding to expand the game.

In the wake of that, Tale Of Tales decided to take its work to more festivals, attracting new donations each time. “A lot of our friends that were doing net art would make in-situ installations at galleries and festivals,” Samyn tells us. “We thought with *The Endless Forest* we could reverse it: take something from the space of the exhibition and put it in the game instead. That way, each [addition] could remain in the game. It didn't have to be taken away after the exhibition.”

While *The Endless Forest* lives on today – partly thanks to a strong Russian following, about which Harvey admits to being pleasantly baffled – it was 2008's

The Graveyard that brought the studio to wider attention. A short game in which you play an old woman visiting the grave of her dead husband, it was sold on Steam alongside a demo, which included all the features of the paid version, minus one: in the full game, the woman would occasionally die of natural causes. The idea of selling death was so unusual, and Valve was so desperate to attract developers to Steam in the service's infancy, that this modest experience soon found itself exposed to a bigger audience than Tale Of Tales had anticipated.

“It was such a strange experience for people,” Harvey says. “At the time, there were only a few other [similar] games, like Jason Rohrer's *Passage*, and they were all crazy cuckoo to most people, so it got attention. We didn't expect it, but [thought], ‘Hey, we'll take it.’”

The Graveyard was developed during a hiatus from a larger project that would become arguably Tale Of Tales' most significant breakthrough. *The Path* was a twisted, idiosyncratic take on the Little Red Riding Hood myth that beguiled players with its distinctive visual design and rich atmosphere. Championed by the likes of designer and author Brenda Romero (née Brathwaite), it proved a hit with critics and many of its players, but brought with it an unwanted kind of attention, the sort of aggression with which game developers have recently become uncomfortably well acquainted.

“There's been a lot of revisionist history around *The Path*,” Harvey tells us. “Which isn't to put it down, because I love it, but my God did we get a lot of hell for that game. We were fucking terrified someone was going to show ▶

up at our house and try to kill us. All this stuff going around now with developers being targeted and harassed... I mean, let's not be naïve here, this is not new."

A series of smaller projects followed, including the alluringly elusive *Bientôt l'été*, which is about communicating abstractly with a distant lover, and *Luxuria Superbia*, a sensual and suggestive music game built around touching the innards of flowers to elicit a colourful response. Yet these games didn't represent a conscious step back from the limelight for the studio, but rather a desire to do something different. "It's in the nature of creativity to want to do things that don't exist yet, I think," Samyn explains, before suggesting that the industry would be in better shape if more creators were in a position to realise their ideas. "More experimentation and breaking of conventions would only make games more like a normal artistic activity."

It's clear the two never considered their games to be particularly unorthodox, nor that they would be perceived as mavericks; only in a conservative industry would their ideas be seen as radical. "We actually consider ourselves Classicists and Romanticists," Samyn tells us. "I find it quite flattering – I'm almost 50 years old and I'm considered to be this kind of avant-garde rebel." But that's not how it feels to me. We just very sincerely make work that we hope people will enjoy."

Having written a new manifesto to celebrate the studio's ten-year anniversary in game development, in which Samyn and Harvey expressed a desire to reach more players, Tale Of Tales began work on what would prove its last commercial game. Having thus far resisted all forms of compromise, the developer found itself in the unusual position of tempering some of its creative instincts to welcome a broader audience to its work.

"[With *Sunset*], we were perfectly willing to compromise," Harvey says. "We talked to friends of ours who [told us], 'If you just take a few steps towards



convention for the sake of those who want to play your games, then perhaps you would have more players.' And we were like, 'OK, let's try it.'"

Adopting a firstperson perspective, rather than Tale Of Tales' preferred thirdperson camera, *Sunset* features a standard WASD and mouse-look interface, a more rigid game structure, and incorporated a storyline over which the player would have only limited

control. "We definitely tried to use basic design conventions in a way we felt was still compatible with our design philosophy," Harvey says.

Though the studio was under no illusions that *Sunset* was going to break into the mainstream, the support on Kickstarter and the efforts invested in publicising the game suggested that Tale Of Tales might finally reach beyond its normal audience. Yet Harvey and Samyn remained healthily cynical about its prospects, looking forward to its reception with hope rather than expectation. Its failure to match even these modest projections was, Samyn says, down to a confluence of factors. "People have told us [since the studio's closure announcement] that they would have bought our game, but already have 300 games in their backlog. And I totally understand that! But that [suggests] to me that games are too cheap."

Harvey isn't excluding Tale Of Tales from that particular criticism, though.

Tale Of Tales is proud of the diversity of its work. "We have not made one normal thing," Harvey laughs, "but we've also never repeated ourselves"

TALES OF THE UNEXPECTED

The silver lining to the studio's departure from making games is that it can now pursue other creative avenues. "Maybe we got a little too involved with this whole thing, and this is the sort of course correction that we need," Harvey says. She is, however, planning to write a book outlining the art and design philosophies behind the games she made with her husband as a way of preserving their ideas. "It's pure vanity!" she laughs. "It's not like this is going to be a best-seller – though I've met [with] some universities who think it's interesting."

"As a community of independent developers, we have trained people to not be discerning – and it's not just us, it's the atmosphere of the App Store and things like that."

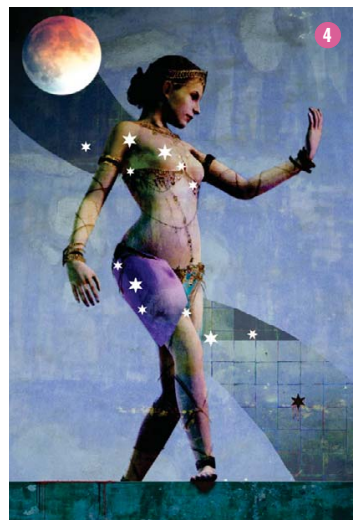
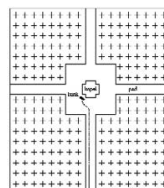
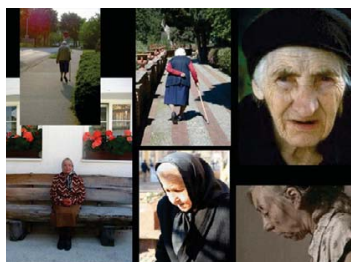
Culturally speaking, she believes there needs to be industry-wide support for unconventional experiences and, beyond that, a realisation that the presence of offbeat fare isn't about to threaten the existence of the big-budget blockbuster. "There's always going to be *Assassin's Creed: Whatever*, and that's fine – your average indie developer can't change that, despite what some elements think."

The fury from those quarters was, Harvey admits, a factor in the pair's decision to call it a day. "I was actually hoping, very naïvely, to reach out to people like that and to give them beauty, and to make their lives better," Samyn says with a smile. "I failed!"

For all that Samyn and Harvey may be moving on to other kinds of work, Tale Of Tales' mission to create a space for new types of interactive entertainment has been an undoubted success. Indeed, the studio's influence can be found in the unlikelyst of places. Take, for example, the widely celebrated Nepal Village chapter of *Uncharted 2*, a sequence that might not have existed had lead designer Richard Lemarchand not been so deeply affected by *The Graveyard*. It's a moment that's perhaps symbolic of Tale Of Tales' former place in the industry: a peaceful, contemplative haven away from all the noise, chaos and violence.

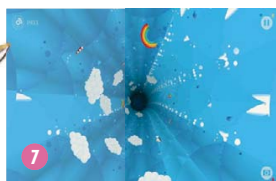
Its own journey as a commercial game-maker may be over, then, but Tale Of Tales has still helped to open the gates for other studios and developers to pursue inventive alternatives to the annual iteration churn. "I couldn't be more proud of the games that we've made and the people who've gone on to make games after us who've said we were an inspiration," Harvey says. "It's an honour to have been a part of people's lives, and that's all we really wanted."

Whether you've played any of their works or not, the game industry will be a lesser place for the absence of Auriea Harvey and Michaël Samyn. ■



WORKS OF ART

- 1 Tale Of Tales likens *The Graveyard* to "an explorable painting".
- 2 Early artwork and photographic research for *The Graveyard*.
- 3 Horror-tinged fable *The Path* was highly polarising.
- 4 *Fatale* explores the story of The Bible's Salome.
- 5 The perplexing, beguiling *Bientôt l'été*.
- 6 *The Endless Forest* is free to download from the studio's site.
- 7 *Luxuria Superbia* is a musical journey with sexual overtones.
- 8 *Sunset*: a critical hit, but commercial flop



Game for a challenge

The winners of this year's **Get Into Games Challenge** – and what to expect at Abertay's Dare ProtoPlay festival

This year's Get Into Games Challenge has come to an end, which means it's time to announce our winners. In early July, we played through every submission and drew up a shortlist of games that was then passed to our judging panel, made up of Funomena CEO **Robin Hunicke**, Unity Technologies founder **David Helgason** and Abertay lecturer **Dr Dayna Galloway**.

This year's winner, **Jon Caplin**, produced atmospheric firstperson adventure *Icarus 1* and wins a trip to Unity's annual development conference, Unite, in Boston, a Unity Pro licence, and an outing to Abertay University's Dare ProtoPlay festival in Dundee.

"Every year we do this, the quality bar rises higher and higher," Helgason says. "However, there always seems to be one game that stands out.

I turned the lights down for a really immersive experience, and the ore collection mechanic was so much fun and perfectly fed my obsessive compulsive neurodisorder. I would love to see *Icarus 1* expanded into a full fledged title, and the idea of playing it in VR makes me excited."

Caplin's creation proved just as evocative for Hunicke: "The game brings back feelings of first playing *System Shock* or *HalfLife*. I love creepy, empty space ships with history, and the sound design on this was especially great."

Galloway, meanwhile, felt particularly inspired by Caplin's strong sense of space and form. "This designer is definitely one to watch, and in my opinion is wholly deserving of the career-boosting prizes that are up for grabs."

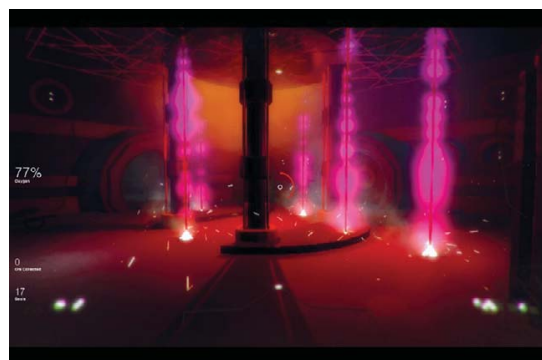
Two runners up each also receive a Unity Pro licence, which this year go to **Carlos Fernandez de Tejada Quemada** and **Guillermo Cle** for their ball-based arena brawler *Sphere 50*, and **Glyph Games** for its gold-obsessed auto-runner *Penny Pursuit*. Congratulations to our winners, and thank you to everyone who took part in the challenge.

Along with a trip to Abertay University's Dare ProtoPlay, which this year takes place from August 13 to 16, Caplin will also be given stand space at the Dundee game festival. Last year, 13,000 attendees descended on the city's Caird Hall to play

the games on show, which include the student projects submitted for Abertay's Dare To Be Digital game design competition and an indie showcase for more established developers.

In addition to the auspicious awards ceremony – which includes the BAFTA Ones To Watch nominations – and events such as the Global Cardboard Challenge, in which participants must try to create a game using cardboard boxes, this year's event is further bolstered by the Edinburgh Games Symposium: ProtoPlay Edition.

"I love creepy, empty space ships with history, and the sound design on [the game] was especially great"



FROM TOP Jon Caplin's atmospheric firstperson adventure *Icarus 1*; multiplayer arena brawler *Sphere 50*; and Glyph Games' swish auto-runner *Penny Pursuit*





LEFT *Chambara* on show at last year's Dare ProtoPlay festival, which attracted more than 13,000 attendees. The arena-based combat game (above) asks you to blend in with your environment in order to stealthily kill the opposing team

Kicking off a day before ProtoPlay, on August 12, the symposium presents a series of talks and panels over two days. Speakers include former Rockstar and Argonaut designer Anthony Gowland; Daniel Lisi, founder of *Failsafe* studio Game Over; and award-winning composer Dr Harry Whalley.

Along with a coveted BAFTA Ones To Watch nomination, there are also some sizeable cash windfalls up for grabs for winning student teams, including a £25,000 fund from Channel 4.

"I've been fortunate enough to be involved in Dare To Be Digital and Dare ProtoPlay almost since the start," Channel 4 games commissioner **Colin MacDonald** tells us when we ask why the company is prepared to invest so much.

"But one of my bugbears all along has been that there are fantastic teams formed, who produce amazing games, but which never see the light of day. This is our way of helping change that – for one team at least – but hopefully also give hope to all the other teams that they

don't need to land multimillion-pound deals to see their games released either. And if the game's a hit, maybe we get a return on our investment and make a TV show out of it!"

Team OK (formerly Overly Kinetic) won this year's BAFTA Ones To Watch award with clever firstperson ninja combat game *Chambara*. It has since been able to expand the development team and also exhibit at this year's E3 with IndieCade.

Designer Kevin Wong feels that ProtoPlay was instrumental in catalysing the team's success. "Exhibiting at ProtoPlay was incredible for the *Chambara* team, because it was incredibly motivating and inspirational to see people, particularly children, play our game en masse and connect with each other through it," he tells us.

"The judges gave us some incredible feedback that has vastly improved *Chambara's* design. What ProtoPlay accomplishes is incredibly valuable for Dundee and the people participating in the competition." ■



Channel 4 games commissioner Colin MacDonald



ABOVE CENTRE Team OK, formerly Overly Kinetic, the group behind *Chambara*. ABOVE Abertay's annual Dare ProtoPlay show and indie showcase

GET INTO GAMES 2015

KNOWLEDGE
IN MEMORIAM



SATORU IWATA

1959–2015

Satoru Iwata, who died on July 11 aged 55 following a battle with cancer, leaves behind no single crowning achievement, but an immense legacy. He joined Nintendo from HAL in 2000, and two years later, aged 42, succeeded Hiroshi Yamauchi as company president and CEO. A warm, humble and funny man, he was in many ways the opposite of his predecessor. And he not only adored videogames, but understood them on a granular level. A remarkable programmer, his work extended from high-school experiments on pocket calculators to his hands-on work tweaking a *Balloon Fight* minigame in Wii U launch title *Nintendo Land*.

Not only did he understand how games were made, he believed passionately in their potential, too, and his desire to broaden the medium's reach led to the creation of DS and Wii. Under his stewardship, Nintendo pioneered touch and motion controls, sold in excess of 250 million systems, vastly expanded the videogame industry's demographic, and saw its stock price soar.

His other initiatives may not have yielded such notable success, but all bear his mark. The Iwata Asks developer interviews put creatives on centre stage long before it was fashionable. Nintendo Direct broadcasts let the company speak directly to players and escape the restrictive hype cycle of trade shows. With the NX console, a DeNA deal for smartphone games and his mysterious Quality Of Life initiative all in progress, his influence will live on at Nintendo for a while yet – and, we hope, long after those projects have come and gone.

Nintendo announced Iwata's passing on July 13. The outpouring of grief on social media was immediate, widespread and truly heartfelt, both from the few who knew him and the many who felt like they did. Videogames, for all the pace of their change, represent a young industry. We're not yet accustomed to losing our giants. And we don't associate such sadness with a medium that offers so much pleasure. Few involved in its evolution have given us as much as Satoru Iwata. ■

There's a menacing note to *Power Drive 2000*'s trippy visuals, which blend '90s-era arcade themes, such as palm trees and blue skies, with imposing geometry and an evil-looking Lotus-Lamborghini hybrid



KITT AND CABOODLE

Megacorn Games dumps pit stops and qualifying for neon-drenched drifting. And a talking car

Power Drive 2000 is, in its developer's own words, his first "real game". The Toronto-based **James Greb** has worked on casual and mobile games for the past ten years, but now he's turned his attention to the arcade racing genre and the decade in which he cut his gaming teeth.

"Growing up during the 1980s, videogame graphics definitely left something to the imagination," Greb says. "The graphics could be considered similar to words in a novel – they gave me a foundation to

form an image in my mind. The style of movies and television in the '80s influenced the way I imagined those games might actually look, and *Power Drive 2000* is really my childhood imagination come to life."

It's an intoxicating aesthetic that taps deep into the feel of the decade, recalling the likes of *Ridge Racer* and *OutRun* as readily as it does classic kids' animation *Pole Position* and the *Airwolf* intro. Set in the far-flung future of the year 2000, the game features 25 tracks and six twists

on racing, including an option in which you have to outrun a police helicopter, and Vaporiser mode, which lines the track walls with a game-ending laser fence.

Power Drive 2000 is part of a gathering wave of retro-themed, single-focus arcade racers which also includes *The 90's Arcade Racer* and *Drift Stage*, but Greb doesn't feel like he's competing with those games so much as contributing to the rebirth of a once hugely popular scene.

"I think we've entered some sort of zeitgeist in gaming," he

says. "Arcade racers have been absent from the gaming scene for quite some time now, replaced by 'realistic' racing games that don't have their own flair or style. I'd assume most of the developers working on games like *Distance*, *The 90's Arcade Racer* and *Drift Stage* grew up playing the same type of games I did – I first heard about *Drift Stage* during their Kickstarter campaign, and that's what prompted me to start showing off my game. I'm really excited that fun racing games are making a comeback." ■

Soundbytes

Game commentary in snack-sized mouthfuls



"I don't think most humans **want to look stupid**, [or] isolate themselves from the world."

The modern virtual reality headset is one augmentation on which *Deus Ex* designer **Warren Spector** isn't yet sold



"In successful western games, there's a sense of scale: a big world and big things. But [with] themes or core ideas, there is **way too much of the same thing**."

Keiji Inafune – now making a *Mega Man Legends* homage – is a model of self-awareness



"**The only colour he had left** was the green nobody wanted, so we made all this [Xbox] stuff with green, and now it's still green. I find that bizarre."

Father of Xbox **Seamus Blackley** on how Horace Luke's stolen marker pens came to define the console's lurid branding

"I don't **take changes like these lightly...** they affect the lives of people who've made an impact at Microsoft."

Microsoft CEO **Satya Nadella** (first-year pay package: \$84m) transitions 7,800 employees to the back of the dole queue



ARCADE WATCH

Keeping an eye on the coin-op gaming scene



Game *Museca*
Manufacturer Konami

Konami's latest cabinet, *Museca*, is currently on test in Japan, but its apparent similarity to *Neon FM* is proving controversial. Like Unit-e's machine, *Museca* is an upright rhythm-action game which sports five big buttons below a portrait-ratio screen. The formation of those buttons is reversed, but the similarities are undeniable. It's a bold move from a company that previously filed suits against Harmonix, MTV, Viacom and Pentavision over patent violations, even once a closer inspection reveals some key differences.

For a start, those buttons are actually 'spinners', which can be rotated as well as mashed, and the game's characters all wield unique perks called "gifts" – such as the ability to recover HP – which can be activated during play using the cabinet's foot pedal. Or lost if you can't quite channel your inner Gloria Estefan.

From an aesthetic point of view, the cabinet is also considerably prettier, sporting a striking angular black-and-white design with red backlighting. Those sleek visuals appear in-game, as well, with gold and blue diamonds making their way down red pathways.

These differences haven't stayed Twitter users' wrath, but Unit-e doesn't seem to mind, saying it's flattered by Konami's apparent homage. To be fair to Konami, *Neon FM* takes plenty of inspiration from its own *Pop'n Music* series, which debuted in 1998.

Museca doesn't have a firm release date yet, but expect it to reach Japanese arcades this year.



www.pegi.info

My Favourite Game

Ed Byrne

The comedian on a suspect diamond trade, feeling like a hitman on tour, and when videogame humour grates

Ed Byrne is a comedian and three-time host of the Golden Joystick Awards, with a penchant for games. As a student welfare officer, Byrne would regularly host events and perform across Scotland's institutions, and proved so in-demand that he quit his horticulture studies to set up a comedy night called The Comedy Cellar. Today he's an award-winning standup and regular panelist on *Mock The Week*, among other shows. With so much going on, he's had to become increasingly creative to make time for games.

We know you love *Skyrim*, but have any of the mods appealed to you?

I have to admit there are no games that I devote that much time to! I keep playing until the next one comes out and say, "Oh, I should play this". The last game I completed was the new *Tomb Raider*. I got to the end, then went back and tried to do a more thorough job of collecting all the doodads, before saying to myself, "What the fuck are you doing?"

What kept you glued to *Tomb Raider*?

It was one of only two games I had with me on tour! If you bring a console there'll be no way to get the TV to go to the AV channel. You get some weird proprietary remote which only works the TV's entertainment system and there's no way to get to the HDMI port. So I took my Xbox One – I've got one of those carry cases with a screen in it, from Gaems. It's an amazing invention.

Presumably quite a heavy one, too.

Yeah – it makes me feel like a hitman every time I arrive at a hotel.

HE'S A VERY BUSY BYRNE
The comedian's had a busy 2015 already, heading to both Kampala in Uganda and the Great British Bake Off tent for Comic Relief, and travelling across America with Dara O Briain for BBC2 show *Dara And Ed's Great Big Adventure*. In August, Byrne kicks off his latest tour – *Outside, Looking In* – at the Edinburgh Fringe Festival before taking the show around the UK. He'll also be putting in two appearances at the New Zealand International Comedy Festival. For show dates and venues, visit www.edbyrne.com.



Do you have a portable system as well?

I used to have a PSP. But (a) I kept losing them, and (b) I never really could get on with the size of the screen. I do some stuff on the iPad, but I just can't be doing with any of the free games where you've got in-app purchases. Because obviously they're designed to be annoying unless you buy, that's the whole ethos of them. For a while there I was enjoying *Clash Of Clans* and *Hay Day*. My wife plays *Hay Day*, and I'll be on the road and buy eggs from her, and there's something quite nice about that. But it's designed so you just keep missing your boat unless you buy diamonds. I'm not buying fucking diamonds! So I just stopped.

Talking of misguided leaders, you've also said you're a big fan of *BioShock*. What was it about the game that appealed to you?

This was before I had my game box thing with the TV, but I had a projector that went with me. It was a quite small thing to carry, but I remember going into a hotel in Birmingham, closing the curtains, turning on the projector, and filling the wall with *BioShock*. It's just such an atmospheric game, that art deco aesthetic. And I love that there's serious consequences depending on whether you decide to go dark or choose the path of light, you know?

It has a dark sense of humour. What do you think about humour in games?

Most games humour I find slightly grating.

"I played *Resident Evil* until I had to prise the controller out of my own hand – it had become a claw"


I can't really be doing with *Grand Theft Auto*. Every time a new one comes out I buy it, and I'm just, "Ah, I'm not really enjoying this". Maybe because I'm used to firstperson shooters. I love *Halo*, and then when you're doing the bit running around shooting in *Grand Theft Auto* it feels very counterintuitive. And I find those very difficult, so I'm doing them again and again, and the characters are repeating the same shitty one-liners that maybe I thought were funny the first time, but they really grate the millionth time. So sometimes humour in games, if you're like me and having to replay levels, is

grating. But, for example, *Portal 2* had some quite funny lines in it. And then there's the stuff that makes you laugh when you get scared. I think my favourite game of all time would be the first *Resident Evil*. I got so totally involved with it, and the first time a dog

jumps through the window you just shit yourself! And then you laugh at the fact you let a game scare you so much.

So would you say *Resident Evil* is your most cherished game?

I think so. That and *Wipeout 2097* were the two games I played until I had to prise the controller out of my own hand because it had become a claw. I was 23, in a flat in Finsbury Park and glued to it. I remember joking about it at the Golden Joysticks: "The PlayStation came out and I had *Resident Evil*, *Wipeout 2097* and *Road Rash* – because you can't just have good games!" ■

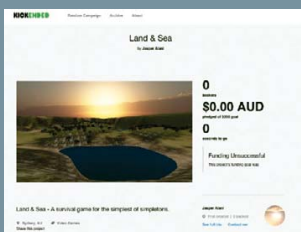


Lately Byrne has been enjoying *Civilization V* on his laptop. "I'm playing as Ghandi. But the Ghandi that just wiped Norway off the map. They rued my expansionist policies!"

WEBSITE

Kickended

www.kickended.com
Kickstarter may have shed some of its lustre recently, but it continues to play an essential part in getting games created. Spare a thought, then, for all the projects that miss their funding goal – especially by the widest margin possible. Kickended collates campaigns for which \$0 were pledged. Among the videogame highlights you can find *Online Player Manager 2*, a modern – and apparently unwanted – twist on *Player Manager 2*, illustrated with artwork from the original alongside limp new sketches. Or “a survival game for the simplest of simpletons” that somehow attracted no response to fund “high quality textures and awesome in-game features”. Not all of the ideas are terrible, but Kickended is a solemn and oddly hypnotic database of what not to do when creating your own campaign.



VIDEO

Star Wars Battle Pod Arcade Unboxing

www.bit.ly/forcebox
While we have little interest in watching somebody else liberate their new console from its plastic-and-cardboard cocoon, on YouTube or otherwise, coin-op-focused website Arcade Heroes' take on unboxing videos are worth a look. The latest shows the delivery, unpacking and daunting construction of Bandai Namco's mammoth *Star Wars: Battle Pod* cabinet. Watching the dome screen and control module being edged off the back of a pickup truck is nerve-racking – you'd imagine no amount of bubble wrap is going to protect that \$35,000 investment.

WEB GAME

There Is No Game

www.bit.ly/isnogame
There Is No Game might only take ten to 15 minutes to complete, but it follows in the grand footsteps of unreliably narrated games such as *Portal*, *BioShock* and *The Stanley Parable*. And, much like Davey Wreden's *Source* mod (later released as a standalone title), *There Is No Game* pokes fun at traditional videogame development as you trespass farther into the virtual world the narrator keeps trying to dissuade you from exploring. It's funny, too, thanks to French creator Kamizato's playful writing and voice acting. Kamizato, a seasoned Construct 2 developer, created it using the software as part of Newgrounds' Deception jam earlier this year. We'd like to tell you more, but it's best experienced with as little prior knowledge as possible. Not that there's a game to experience, of course.



THIS MONTH ON EDGE

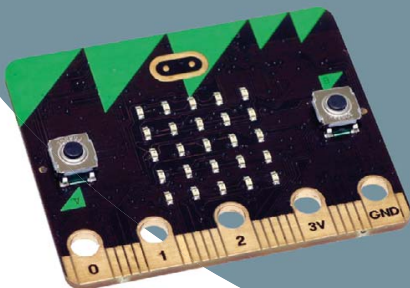
When we weren't doing everything else, we were thinking about stuff like this

MICROCOMPUTER

BBC Micro:bit

www.bit.ly/bbcbcode

Following in the footsteps of Raspberry Pi and Acorn's BBC Micro, the Micro:bit is the British Broadcasting Corporation's attempt to encourage more children to try coding – just as the BBC Micro did in the '80s. The tiny device measures just 4cm by 5cm (considerably smaller than a Raspberry Pi), is powered by a 32bit ARM Cortex chip, and features two built-in programmable buttons, 25 red LEDs, an accelerometer, and a magnetometer. You can communicate with the board via Bluetooth, a micro-USB connector or the three digital/analog I/O rings. Created in collaboration with, among others, ARM, Samsung, Microsoft and The Wellcome Trust, the BBC plans to have distributed one million free Micro:bits to schoolchildren by the end of the year.



continue

It's taken ages...

...for Sega to realise releasing quality games is good business strategy

Friend cull

Companion App hype is on the wane at last

Letterbox 360

Microsoft's new video is honest about HoloLens's narrow field of view

Pier review

Time by the sea provides opportunity to get stuck into *Monster Hunter*

quit

Yager bombs

How bad does a *Dead Island* game have to be for Deep Silver to act?

Spoil her warning

Let's keep our *Her Story* theories to ourselves, eh?

Arkham Knightfall

One of the poorest PC ports of modern times is rightly pulled from sale

A new Project

Forget all those *Project Cars* bugs. Let's crowd-fund a sequel instead

TWEETS

RIP Satoru Iwata, this planet has lost him far too soon, but he helped create so much joy while he was here, and that will live on.

Rex Crowle @rexbox
Creative lead, Media Molecule

So sorry to hear about Mr Iwata's passing. He was an unbelievable mind and talent, a passionate creative force. May he rest in peace.

Zelda Williams @zeldawilliams
Actress

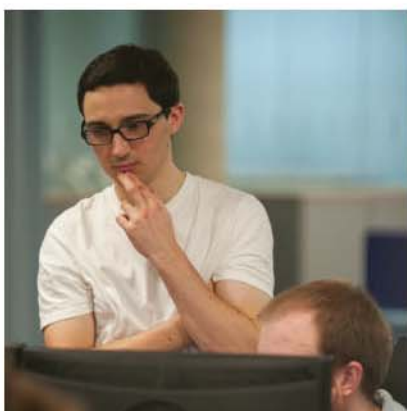
Whenever Mr Iwata was in the office, he'd change his 3DS StreetPass message to "Hello NOA!" Was a company president that cared.

Andrew Kelly @AndrewNK
Former Nintendo Of America PR

Extinguish all the lamps in the world
Make a pitch-black night
With that powerlessness
Can you please just do that for me?
Shigesato Itoi @ittoi_shigesato
Designer, *EarthBound* series



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A billion reasons to sign up with **PowerVR**

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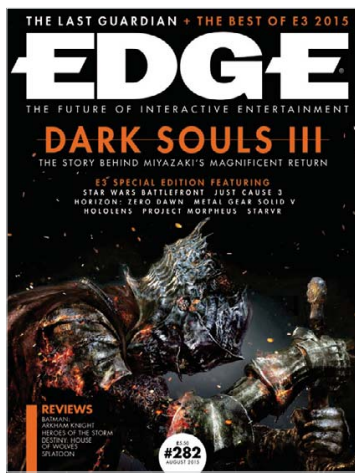
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www.imgtec.com



DISPATCHES

SEPTEMBER



Issue 282

Dialogue

Send your views, using 'Dialogue' as the subject line, to edge@futurenet.com. Our letter of the month wins a New Nintendo 3DS XL, supplied by the Nintendo UK store



Protest demo

One of the principal joys of reading *Edge* each month is the challenge it offers to our thought processes about games.

Reading the introduction to *Edge* 281, I was struck by the brief exposition about who *Edge* readers actually are. If I'm being candid, despite being an *Edge* reader of many years, the question was one that I'd not seriously considered prior to the editorial. However, the question struck an emotive chord and planted a seed of thought which I've been dwelling on since (hence the lapse of time in my writing).

The result of my self-reflection was the agreement with *Edge* that 'tidy demographics' would not do justice to what is *Edge*'s clearly wide readership. In many ways, I suspect I am atypical of, to use the rather lazy moniker, a 'gamer's' status. I am female, in my late 30s, married with two children and in a professional occupation. How many lazy stereotypes are busted there? I can imagine the marketing men (whoops, another assumption) going into meltdown with that profile to contend with.

My love of games stretches back to the trusty ZX Spectrum and has seen me through the joy of several generations of consoles and games since. Indeed, within my own nuclear family (a very tidy demographic), I have been integral to our shared love of videogames to the extent that I often find myself the first port of call for help from my children when stuck upon a particularly tricky aspect of their latest gaming foray, much to my husband's 'masculine' chagrin. During this time, I have never felt compelled to reflect upon my status within our hobby in the way *Edge* 281 prompted me to do so. Perhaps it's an age thing. Perhaps it's a demographic thing. Perhaps it's simply the realisation that videogames present us with such an

intriguing paradox: that within their rich diversity there is unity, namely the common pursuit of that deliciously indefinable 'sweet spot' when enjoying our games, whatever form of game that may take. This sort of fundamental unity does not take note of 'tidy demographics'.

So, long may *Edge* seek to provoke the wonderful (in the truest sense of the term) videogame industry in its voyage of self-discovery! Now, excuse me, I must get back to my list of reasons as to why the children's pleas to finally upgrade from PS3 to PS4 are so unreasonable...

Joanne Raisbeck

"Games have cultural value. Depriving children of that is a missed opportunity"

This was just a way of securing a New 3DS XL with which to keep the children quiet until you're ready for a PS4, right? Well, it's done the trick.

Children's menu

A few weeks ago, I saw a woman, shopping with her young son, wonder aloud: "Where are the kids videogames these days?"

I thought it was an extremely pertinent question. I'd previously not given it a second thought. Besides sports, driving and the odd movie tie-in, a child's choices on modern consoles continue to be limited.

Roll forward a little to another encounter, this time with an old friend who is now father to two toddlers. He doesn't want his children playing videogames. Instead, his preference is that they be more active. I reminded him of his own Super Nintendo fixation but had to concede we spent a lot of time on our bikes and playing in the street. I asked if he would let his children play in the street like we did. You can guess the answer.

So in a world where kids are now less likely to play in the street, videogames offer an alternative way to learn about the world in a safe environment. Yet current console game design sensibilities are focused on an



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older audience that effectively serves as a barrier to entry for the young.

Overall, I think the game industry is in a good place right now. The breadth of titles available through a second indie generation and the scale of ambition of bigger releases (*GTAV*, *The Last of Us*, et al) has revitalised the industry. But this entry barrier for a new audience is troubling.

Games have educational value alongside other mediums, conventional teaching and good parenting. They have such potential for the practical application of everyday knowledge: reading, maths, physics, route finding, systems logic, creation, problem solving, resource and budget management – the list goes on.

Games have cultural value. Depriving children of that is a missed opportunity. No wonder *Minecraft* has become so big, with that younger audience especially, when there are so few alternatives.

William Wood

There's a sense that young children have moved away from consoles and towards iOS/Android, which may explain it. That and the fact that very few seem willing to face up to the all-conquering Minecraft, of course.

Focus attack

As a gamer you can't spend more than three seconds on a forum or in a comments section without seeing a comment about the 'PC master race' or 'console peasants'. I've been a console gamer for all of my gaming life: it started with PlayStation, and doesn't seem like its going to stop any time soon. I'm always asked by my PC-loving friends why I don't invest in a PC, where I can play *The Witcher III* in 60fps and perhaps see more leaves blowing around. In between me tirelessly pointing out that it makes no difference to me, and I've enjoyed playing *The Witcher III* in 900p/30fps on my Xbox One just as much as I would have on a beefy gaming rig, I sought an analogy, and believe I have found the perfect one.

Gaming systems are like cars. PlayStation 4 and Xbox One are equal to the Ford Focus: they are relatively cheap and get you where you need to go. High-end gaming PCs, with their i7 this and GTX SLI that, are like the exotic cars that you find on the road: the Audi R8 or Ferrari 458. Sure, they look nicer and go faster, but the speed limit is 60mph and you can't legally go any faster. Sure, your Ferrari sounds nicer, looks better and accelerates faster, but at the end of the day on the commute to work you've only beaten me by a few seconds and paid four times the price. You may believe you've had a much better experience that is worth the money, but the bottom line is we are still both driving on the same road.

The analogy stretches further. My Ford Focus doesn't take up much fuel whereas your 700w-plus power guzzler uses three times as much. My Focus will last for years whereas your Ferrari will break down, and the replacement parts will cost a fortune.

Don't get me wrong. Everyone wants a Ferrari, but not everyone has the money to afford one, or keep it running. Maybe some time down the line I will invest in one of these exotic cars, but at the moment I'm happy with my Ford Focus. And as for the Wii U? Maybe it's one of those Smart cars.

Matthew Cheetham

This, as you know, is a multi-vehicle publication. We use our Focus for the daily commute and keep the Ferrari in the garage until we know we'll be driving on roads that will do its formidable horsepower justice. Then we get stuck in a BSOD loop after a poorly researched overclock, have to restore our BIOS settings and reinstall Windows, and, uh, the analogy rather falls apart.

Sailor moan

Say what you like about DLC, but you can't deny that if the player wants it, it's accessible and not going to inflate in price on the market. If people want to buy Amiibo because they're so damn irresistible or

they're building a collection, fair enough. But what about people who don't have the shelf space to spare and just want the unlockable content? Let's face it, *Smash Bros* aside, Amiibo functionality so far has been standard DLC fare like extra skins, game modes/challenges and playable characters. I don't see why Nintendo doesn't make these extras available at a later date on the eShop and not be at the mercy of eBay hustlers. If anything, it adds even more revenue to the already whopping sales of Amiibo.

It's not just DLC, though. While classic game libraries do exist on digital stores, it was only when Nintendo began to sell Wii titles on the eShop that it hit me. *Metroid Prime Trilogy*, a game released in such limited quantities that it was going for double its original price on eBay, suddenly released digitally for everyone at a discount?

What a great way to stick it to those evil capitalists treating games as commodities, and give the players what they want. OK, if people want to really collect rare physical cartridges, I'm not against that per se, but games are made to be played, and the only way to preserve their history is to make them accessible for people to play.

I guess what I'm really trying to say is that I regret having sold off my Dreamcast and games a decade ago, and now that *Shenmue III* has been announced, I want to play the first two games all over again without forking out for an old console and overpriced copies of *Shenmue I* and *II*.

On a related note, is there any chance of **Edge** transferring all of its old reviews and features over to GamesRadar, or are you going to make a fast buck by having me buy all the back issues?

Alan Wen

Perhaps Shenmue III's Kickstarter success will convince Sega to finally release HD remakes of the first two games and save you a few quid. That way, you can spend the balance on some reasonably priced back issues. Look at that: we're all winners! ■



STEVEN POOLE

Trigger Happy

Shoot first, ask questions later

One hundred years from now, thanks to advances in human rejuvenation science, the artist Fumito Ueda will still be alive, and will shock audiences at the 2115 E3 trade show by appearing in public for the first time in 73 years, sporting an enormous beard. The massive reveal will be that he's still developing *The Last Guardian*, having had to port the code to dozens of new platforms in succession without ever quite finishing it because none could fulfil his vision. Until now. At last, totally immersive direct-brain-stimulation technology will allow players to smell the powerfully musty odours of the giant feathers on their helpful cat-bird animal, and *The Last Guardian* will definitely be out some time in the following year, or perhaps decade.

For all of our sakes, I hope this is what actually happens. And I say this as someone who believes that Ueda's most recent finished work, *Shadow Of The Colossus*, is one of the greatest videogames ever made. When I spoke about it at a conference in Vienna way back around the time *The Last Guardian* was announced, I also played a clip of the then-current demo – so astonishing it was back then! – by way of shaming basically everything else that was going on in the medium. I've been wanting to play *The Last Guardian* ever since. And yet I also hope it will never be released.

Not, mind you, because there was anything wrong with the new demo at this year's E3. It looked as beautiful and moving as ever before, and still years ahead, in terms of affective aesthetics, of anything else. Some archly unimpressed commenters, of course, immediately laid into it, complaining that the human-animal interactions were obviously scripted. It is rather odd how 'scripted' has come to be a term of abuse in videogame commentary. We don't complain that interminable scenes of FMV dialogue are scripted, but heaven help a game that decides a particular action beat should happen in a particular way for dramatic effect. In using



It might mean more to many of us if *The Last Guardian* remained the eternal Crystal Palace of videogames

'scripted' negatively in this way, we imply that we want always to be in control and able to affect the action in any way we please. Yet we cannot affect all the manifold rules, assumptions, and mise-en-scène that frame the game's action and constitute its underlying laws of nature. Taken together, those elements are a much more constrictive overarching 'script' in themselves.

The script of *The Last Guardian*, in this wider sense, is evidently a thing of beauty. But maybe it is too good for this world. If the game is ever released, there are bound to be slight defects – fiddly positioning, camera

issues – of the kind we forgive in lesser videogames, but that it would be hard to forgive in this one, precisely because it promises to be so ethereally perfect.

The Last Guardian, then, will arguably do the game industry as a whole immeasurably more service if it remains in the quasi-Platonic realm of endless development, and so can remain forever unblemished in our heads, a model that merely completed games must always humbly acknowledge. It ought to continue playing the role, for players and developers alike, of an unrealistic aspiration, much like the Crystal Palace in Dostoyevsky's novel *Notes From Underground*.

In that novel, the Crystal Palace represents a social utopia. "The palace of crystal may be an idle dream," the narrator says. "It may be that it is inconsistent with the laws of nature and that I have invented it only through my own stupidity, through the old-fashioned irrational habits of my generation. But what does it matter to me that it is inconsistent? That makes no difference since it exists in my desires, or rather exists as long as my desires exist." Any attempt to actually build the Crystal Palace, however, would betray its ideals and become an ugly, all-too-solid thing at which Dostoyevsky's anti-hero would probably feel compelled to stick out his tongue. Its purpose is to remain forever conceptual.

I cannot pretend to know whether such considerations have sometimes occurred to Fumito Ueda himself as he has wrestled for the better part of a decade with his glorious vision. And for the sake of human sympathy, we must also hope that he does complete his work, and that it earns the success that he deserves. Even so, it might mean even more to many of us if *The Last Guardian* remained the eternal Crystal Palace of videogames, gesturing in the most haunting way at an unrealisable vision, sustaining nothing less than all our desires.

Steven Poole's *Trigger Happy 2.0* is now available from Amazon. Visit him online at www.stevenpoole.net

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IAN BOGOST

Difficulty Switch

Hard game criticism

As Dave Their writes in *Forbes*, “The ability for two people on opposite sides of the planet to feel like they are physically in the same room could represent one of the biggest changes in communications technology in years, maybe decades.” He’s talking about consumer VR in general, and the Facebook-owned Oculus Rift CV1 in particular. Perhaps VR’s time has finally come, after three decades of waiting.

In games, consumer VR mostly offers a new kind of solitary experience. It builds on the realism of 3D-rendered environments, making them seem truly volumetric; you are inside the world rather than staring at it. And while some may still have trouble with simulation sickness, improvements in refresh rate, resolution and visor weight have made VR better than it’s ever been.

Even still, VR works best with relatively stationary experiences. Looking around with your head movements is magical, but piloting a character through 3D space in the usual manner can feel like a mixed metaphor. The natural mapping of head to neck runs counter to the manipulation of a character with analogue controls.

This is what makes Their’s prediction so interesting: it’s not the head that delights him, but the hands. Oculus Rift’s hand controllers offer a means to signal your presence in virtual space through the body language we’re used to using in our ordinary, embodied meatspace. That’s how we often signal our intentions, impatience, and so on.

Presence has always been a goal of virtual reality. While VR games promise to insert us into other environments, since the beginning VR has also promised virtual connection — that is, to put more than one person together in such an environment. This is also why Facebook took such an interest in Oculus. Even though the social network was ostensibly a gaming platform a few years ago, today it’s all but abandoned games as a central part of its business. Instead, it deals in interpersonal connections and exchanges,



The most successful social technology since the telephone isn’t Second Life or Sony Home. It’s text messaging

of which games are an occasional instance. If VR even has a good chance of offering a new way to socialise, then you can understand why Facebook wants to be in on it.

But as far as the biggest changes in communications technology are concerned, well, we’ve been here before. Co-presence has been around for decades, and technologies that increase presence compared to earlier ones haven’t necessarily thrived.

A hundred years ago, the telephone was already fully installed and integrated into public and private life. Thomas Edison had said that the device “annihilated time and

space”, and since then every other person-to-person device has only built on the idea of reduced space and time allowed by telephony. But precious few technologies have even come close to reaching its universality. The TV and radio don’t count — they’re broadcast media, even in the Internet age. The videophone in all its varieties, from early experiments in the 1970s and ’80s to Skype and FaceTime today, offer a useful addition to the telephone, but hardly a universal one.

Virtual 3D environments as meeting places also have come and gone without taking root. It’s perhaps no accident that Cory Ondrejka, the former architect of Second Life, was the Facebook executive who helped bring Oculus into the fold. Second Life also offered a version of the embodied virtual presence, even if via the avatar instead of the VR head. And via hands, too: Second Life avatars famously acted out the gesture of typing when their puppeteers were pecking away at their keyboards.

But the most successful social tech since the telephone doesn’t simulate presence, and it isn’t videoconferencing or Second Life or Sony Home. It’s text messaging.

Billions of people send texts, and most send them from devices that are capable of more virtualised forms of communication, including telephony and video calling. More than a century later, the only real challenge to the person-to-person voice communication system that Alexander Graham Bell patented in 1876 is short text messages on phones and services such as GChat and WhatsApp.

Gaming might not be enough to sustain VR. Dave Their might be right that it will be reliant on a broader adoption of virtual reality for social encounters. And in that case, the biggest threat to VR play isn’t gimmick or gadgetry, but that great typhoon that amplifies text messaging far beyond the capacity of the telephone a century ago. For VR to win, must emoji also lose?

Ian Bogost is an author and game designer. His award-winning A Slow Year is available at www.bit.ly/1eQalad

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NATHAN BROWN

Big Picture Mode

Industry issues given the widescreen treatment

At E3, I entered a *Street Fighter* tournament. For the second year in a row, Capcom was running a single-elimination, best-of-three tourney for members of the press. For a fighting game fan, it's a hell of a thing, livestreamed on the same Twitch channel that broadcasts *Evo*, commentated on by the same pundits, and shown on a big screen on the E3 show floor. Last year, I won it, commentators Mike Ross and Peter 'Combofiend' Rosas saying how proud the Queen would be that I'd brought the trophy home for England (as if — as any true Brit knows, our Liz is more of a *Capcom Vs SNK 2* gal).

Anyway, this year, I didn't win (the Palace was *livid*). Last year it was *Ultra Street Fighter IV*, but this year we were playing *SFV*, a game I'd played for only a few hours. Worse still, Capcom had announced only six characters in time for the tournament, and not one of them was called Ken Masters. I'd gone with a familiar, but not familiar enough, character — Ryu, I'm afraid — and lost in the semis to a very good Spanish player. He had a better Ryu than me, certainly, but later, as I sat licking my wounds in a *Rise Of The Tomb Raider* presentation, I realised I'd made life even more difficult for myself by making a couple of critical mistakes. They weren't dropped combos, but psychological errors born of the fact that I have become far too used to playing online against opponents who I can't see, and can't see me.

I lost the first round to a series of charged, multi-hit fireballs that were timed to hit me as I was standing up. In *SFV*, you can't block these: the first hit breaks your guard, and the final one knocks you down. I got hit by three or four of them in a row, and after the KO turned to my opponent and said, "What am I supposed to do about that?" It's the sort of thing I'd say all the time while playing online, but you can't do that in person — I'd shown, and then outright told, an opponent I didn't know how to deal with one of his tricks. I would lose the final



In my teens, I won a game of *International Superstar Soccer 64* by giving a friend a dead arm while he took a penalty

round in similar circumstances, to a charged version of Ryu's super that moved a whole lot faster than I was expecting.

My other error was to contemplate a character change after that loss, my cursor hovering over Birdie, the lumbering grappler the pro players spent most of E3 wrecking each other with, for a good 30 seconds, before simply picking Ryu again. Had this been online, my foe wouldn't have seen any of it, since character select is blind. But here, he'd had a 30-second display of my crisis of confidence. He knew I was there for the taking and came at me aggressively. A couple

of minutes later, I was sloping forlornly off to Microsoft's booth, my phone buzzing as irate texts began to stream in from minor royals.

I am not alone in this. The best *Street Fighter* players I know all agree that the only way to do better in tournaments is to play against human opponents regularly. It's not just that playing online breeds bad habits, but that local multiplayer has become so rare that we all need to relearn how it works. In my teens, I once won a game of *International Superstar Soccer 64* by giving a friend a dead arm while he took a penalty. That trick might have been frowned upon on the E3 show floor, but the thinking behind it holds true: when your opponent is sitting six inches from you, you can get into their heads. At a recent *SFIV* tournament, I saw one of my favourite players, PR Balrog, take his seat before a match and shuffle a few inches to the side. When his opponent sat down their arms touched; 'Rog apologised, but didn't move, forcing his opponent to shuffle a bit. *Street Fighter* is a game of controlling space, and he'd started the match the second he sat down. He won, of course.

For the past decade, developers have overwhelmingly catered for the online player, and I get it. For them, it's a way of keeping the disc in the tray — lengthening user engagement, or whatever they're calling it this week — with an endless, constantly available multiplayer mode. And it suits me, too: it's an awful lot easier to sneak in a couple of ranked matches while my wife puts the boy down for the night than it is to get a group of friends together for a tournament in my living room. Online multiplayer brings people together in a way that the games of my youth never could, but we've lost some magic along the way: the psychological tricks, the well-placed dead arms, the look on the face of a well-beaten opponent. And in my case, the stern, disapproving look of one seriously pissed-off monarch.

Nathan Brown is *EDGE's* deputy editor, and is currently training for a *Tekken 6* money match against Princess Anne



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THE GAMES IN OUR SIGHTS THIS MONTH

- | | | | | | |
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Explore the iPad edition of Edge for extra Hype content

Why so serious?

Perhaps it's the shrinking window of innocence, but 'toy' has become a horribly loaded term. To adults, it carries an air of infantilism, of childhood things put away for a stable job and a swelling ISA. Others take the defamation further. Hadn't you better stop playing with toys and grow up?

In light of this, proponents of games have long argued against that label. It's reductive, they argue. Games should be taken more seriously. Yet this medium is still primarily about play and, however we disguise it, still thoroughly dependant on toys. A sandbox is just a boring mound of grit until you put things in it and apply a little imagination, after all.

Hitman (p44) is a perfect example. On the outside, it's a game about contract killing, but its globe-trotting assassinations would be fatally dull if not for reactive AI systems to poke and a toolbox full of methods with which to do so. Falling chandeliers, sabotaged catwalks, detonating heaters: all are options. And what smacks more of childhood afternoons than playing dress up – a bartender's uniform to deliver a cocktail of poisons, perhaps?

Cap's resurfacing *Below* (p60) is also full of systems you need not use, giving you the freedom to toy with the ingredients it offers without enforcing approaches as you plumb its procedural depths. It's even daring enough to snatch your playthings away, a secret-revealing lantern gone forever if dropped and not recovered in your next life.

Funomena and Keita Takahashi collaboration *Wattam* (p58), meanwhile, is gloriously aware that it's a toy, its very inspiration being some play time shared between the *Katamari* creator and his son. It asks you to repopulate a town by playing around with an unusual clutch of residents, using their powers to create living towers, which you then send hurtling into the sky to explode.

Toys aren't hollow. They should be emblems of wonder, joy coalesced into playable forms. And who doesn't want a little childlike amazement when they sit down to play?

MOST WANTED

Rainbow Six: Siege PC, PS4, Xbox One

Ubisoft is reinstating *Vegas 2* co-op mode Terrorist Hunt, now renamed Terror Hunt. Picking off AI through freshly made holes in the wall should prove an enjoyable change of pace from having human players do the same to us.

XCOM 2 PC

Our new alien overlords are welcome, since they let Firaxis rewrite the rules of a strategy classic. Rather than the careful creep from cover to cover, *XCOM 2* finds tension in fraught raids, while procedural maps promise variety enough to last several further defeats for our species.

Year Walk Wii U

Simogo is retelling its dark, folkloric tale on Wii U, refreshing the puzzles with new controls and adding second-screen elements. Slightly worryingly, these include the mysterious encyclopedia once presented as a companion app, which delivers the narrative coup de foudre.

H | Y
P | E

NO MAN'S SKY

Hello Games sheds light on the dark matter
of what you do in its procedural universe

Publisher	Hello Games
Developer	In-house
Format	PC, PS4
Origin	UK
Release	2016



Embarrassingly, we've only just landed on a new world and already we've misplaced our ship. "It's a ballache; I like that," says Hello Games managing director **Sean Murray** when we crack and ask if there's a faster way to return to our craft. "I have this [design] argument with the guys all the time, but if I hand someone the controller, the first thing they'll do is lose their ship. Even in games like *Far Cry 4*, *Dragon Age* or *The Elder Scrolls IV: Oblivion*, which are huge worlds, there are pathways. They want me to go this way to get some plant at the top of a mountain, but I prefer to go *this* way, and I'll just buggily hop up. We don't have those predefined pathways."

That's partly down to the fact that hand-carving lanes into 18,446,744,073,709,551,616 planets would put *No Man's Sky*'s release date beyond the lifespans of the current team, but Hello Games isn't looking into procedurally generating paths either.

"It's really fun to watch, because people spend their first half hour with the game getting lost — hopefully in a good way," says Murray. "Then you see something: suddenly they start treating it as a real place, using landmarks [to navigate]. They'll say, 'Oh, I'm at the other side of that lake now.' They'll land their ship and say, 'I'm leaving my ship by those trees,' remembering places like that to find their way back. That's quite a nice thing."

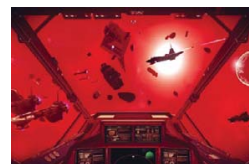
If only we'd planned before bounding off into the unknown. When we do find our way back to the spaceship (which, mortifyingly, turns out to be only 40 or so metres away), our immediate impulse is to continue exploring, so we burst up through the atmosphere and then hold Circle to gad about the solar system at interplanetary speeds. Such a nomadic lifestyle is all very well, but Hello Games hasn't been particularly vocal on what you can do when you reach a new location. Quite a lot, it turns out.

Unsurprisingly, exploration forms the backbone of the game. You can turn your intrepid wanderings into profit by cataloguing the planets and creatures you encounter, and then uploading that information to a network called Atlas via beacons found on every globe. Everything you find gradually builds up a massive personal encyclopedia, too, but discovery matters: if somebody else happens to land on a planet you've already visited and tries to upload the details of a creature that you identified first, the name you chose for it will be imposed upon their database. Naming an ugly creature after one of your enemies, then, is a convoluted — and mathematically improbable — way to get one over on them.

"A lot of people will share those discoveries," says Murray. "Not just by ►



Hello Games managing
director Sean Murray



MAIN These walkers are both heavily armed and heavily armoured, so getting on the wrong side of them (either by attacking local wildlife or damaging structures) is a risky, albeit profitable, move.

ABOVE Your craft might not be able to match the scale of the cruisers that you'll encounter, but you can still build large ships suited for cargo haulage and trading.

LEFT As in *Elite: Dangerous*, *No Man's Sky's* many space stations tend to share the same innards, but come in a wealth of shapes and sizes



MAIN The huge fleets that move through the cosmos are astonishing sights. You can join forces with them, or turn your ship's lasers on their hulls – it's your choice.

ABOVE Some creatures, winged or otherwise, are only aggressive in packs, and will leave you alone if they're not with other members of their species.

RIGHT The night brings new challenges, but you'll still have to fend off planetary defence drones if you tread on any butterflies, or their extraterrestrial analogues





NO MAN'S SKY



Virtually possible

What a game to hammer home the case for Project Morpheus, we muse while exploring. Murray grins. We're clearly not the only ones in the room to think so. "I don't know what I'm allowed to say," he tentatively begins. "It's something we're thinking about. Morpheus, Oculus... There's nothing more cool and sci-fi than VR and a big procedural universe. I think that, for the people who want to just explore, and even for the space combat and things like that, it would be a good fit. Let's put it that way."

uploading them [at beacons], but by actually pressing the Share button, or uploading to YouTube, or creating little animated GIFs of the specimens that they've found, because you do find some weird, hilarious creatures."

Conservation and classification don't have to feature at the top of your list of priorities, however. Earlier on in our demo, Murray reluctantly executes a bipedal leporidae-like – "I hate doing this, because I'm a hippy" – to demonstrate the consequences. A floating drone floats into view and attacks, and as Murray continues to slaughter the local fauna, the number of bots increases. A wanted level fills as the situation worsens, and eventually the game summons towering walking drones to the fray. Destroying any drone makes you money, so if your equipment's good and you aren't ecologically minded, you can rampage your way across galaxies without bothering to contribute to the collective encyclopedia. Murray's rage isn't sufficient, however, and he succumbs to a barrage of lasers.

The gun you carry is more than just a weapon, handling scanning and mining duties

"In a lot of sci-fi games, all their weapons are basically AK-47s with some red stripes"

alongside the potential for catalysing mass extinction events. It can be upgraded by adding alien technologies (which you'll discover and combine throughout your travels) to a grid menu that represents the tool's innards, and placing similar techs next to each other offers further performance boosts. Your scanner, for example, starts out as a short-range directed beam, but with the right tech can become a wide-reaching pulse that emanates out from you. The improved scanner can also detect resources buried beneath the surface or in rocks, and you can then use your laser to mine them.

"In a lot of sci-fi games, all their weapons are basically AK-47s with some red stripes down the side," Murray says. "We don't like that; we want something that feels advanced and cool. So you have this multitool, which is a little bit like a tricorder."



Your ship can be upgraded in a similar manner to your multitool, and you can take your activities offworld, too, picking sides in the space battles that will erupt across the universe, bringing a certain brand of justice to pirates, mining asteroids, or trading at the space stations that ferry goods back and forth from trading posts found on planet surfaces. If you'd prefer to put down roots, you could theoretically spend all of your time exploring, mining and trading from just a single planet (every example being "planet-sized", Murray stresses). All told, there's a lot more to do in *No Man's Sky*'s unfathomably large universe than early demos suggested.

Another aspect that hasn't been discussed in detail before are the various day/night cycles that you'll encounter on each strange new world. Seeing the night make its way across the surface of a sphere as you descend into its atmosphere for the first time is a stirring sight. We head into the dark to land, and Murray apologises in advance – it's Sod's law, he says, that this unexplored planet will "look ugly" when we touch down. He couldn't be more wrong. The darkness encourages new creatures onto the blue-tinged savannah and the grass sways in the soft light of a sky-filling moon. You can be as industrious as you like in *No Man's Sky*, it turns out, but your strongest memories are likely to be forged in the moments when you do nothing and just take it all in. ■

While planets' surfaces are tempting enough to explore, more waits below for those prepared to dig in. "One of the nicest feelings is drilling a hole and finding massive caverns or underwater caves," Murray says

H | Y
P | E

HITMAN

Io preps a world of marks for the coldest-blooded assassin in games

Publisher	Square Enix
Developer	Io-Interactive
Format	PC, PS4, Xbox One
Origin	Denmark
Release	December 8

The latest entry in the *Hitman* series might have shaken the subtitles that have been tailing these games ever since Agent 47 first snuck menacingly onto our screens, but it's not the reboot you might expect from such an act of nomenclative restraint. Io-Interactive instead sees its new game, which takes place after *Absolution*, as a distillation of everything that's good about the series — its perfect assassin sim.

"We wanted to try to send that message that we've tried to condense everything into what we believe is the best possible version of *Hitman*," explains creative director **Christian Elverdam**. "So we took DNA from a lot of our previous games, and that's why we called it, simply, *Hitman*. We intend to keep adding new locations and expanding the world, so this is where we're going to be for a while. And since Agent 47 is at his peak, it's a pretty cool place to be."

The studio has dubbed this vision of an ever-expanding, continually evolving game a 'World Of Assassination'. This will encompass regular updates that add new locations, new missions and new hits — some of which will only appear temporarily and furnish players with just a single attempt at a successful kill. Within this framework, Agent 47 continues to take orders from the ICA's Diana Burnwood, his longtime handler at the Agency, who will

disseminate where the next mission will take place and also update 47 during missions.

"We thought there was something cool about Diana going, 'Oh, we're going to Italy, 47,'" Elverdam says. "We've talked about Paris, we've hinted at Italy, Africa and Morocco, but we'll go beyond that. That feeling that you don't know exactly where you're going to go next is really compelling."

Before those destinations come into view, however, Elverdam walks us through the game's Paris map. The mission is set during a fashion show hosted by our target: Russian oligarch and fashion magnate Viktor Novikov, who has staged the event to cover his attempt to sell sensitive information about European covert operatives. It's being hosted in an open sandbox that's gated only by the brawny-looking security operatives keeping the guests in check, but today Agent 47 is just one of that crowd, armed with a VIP pass thanks to ICA connections. Which means that one option to proceed is simply to saunter in right through the front door. Doing so might result in some pretty undercooked preparations, of course, but there's going to be plenty of time for reconnaissance in this *Hitman*.

"When you build a *Hitman* game like this, the pacing changes," Elverdam says. "In *Absolution*, you were often hunted, and ►



Creative director
Christian Elverdam



"We have a really sweet spot with [current] gen," says Elverdam. "Now we can fulfil *Hitman*'s potential. It's a huge sandbox and you carry out hits on your own terms. That's what we needed to arrive at"



HITMAN



a lot of the game was traditional stealth gameplay. What we have here is a weird hybrid. Because I'm going to kill Victor Nabokov, which means I'm going to strike — I'm going to start trespassing — we don't need to pressure the player upfront. That will come all on its own when you start fooling with the systems. I think that's the first mental journey that people need to take: to realise that this game is all about doing something, and then finding out what happens if you tamper with that part of the sandbox. And sometimes the results can be pretty unpredictable."

One particularly pleasing example we're shown of this flexibility involves smuggling an anti-personnel mine into the fashion show. Those aforementioned security staff will frisk you if you try to enter restricted areas, so if you're planning on walking through, you can't have any sharp objects, guns or explosives about your person. To get around this, Elverdam plants a mine behind two guards stationed outside, next to a fountain. We initially assume he's going to take them out, but instead Agent 47 flicks a coin in their direction. Both notice the noise, and one moves forward to inspect further, noticing the device. Perhaps ill-advisedly, he bends over, picks up the device and tells his colleague he's taking it to the armoury for safe keeping. The result is twofold: moving a weapon into the building for you and isolating a guard should you feel the need to choke him.

It's an intelligent piece of design and hints at the complexity of the AI system, which is balanced in equilibrium and awaiting your inquisitive prods. You might equally sneak a rifle into the show using one of the crates filled with AV equipment stacked up outside, or perhaps finding a way of getting up high and loosening the bolts of a well-chosen chandelier could bring your mission successfully to a close. If you're careful, you could tamper with the patio heaters outside and rig one to explode. Then again, you could just procure a barman's outfit, wait until Novikov comes to the bar and then serve him a poison of his choice — and yours.

But there are more rolls of the dice to consider, complicating your task beyond

simply getting Novikov to successfully ingest the concoction. It might prove effective and result in his death, or it could simply render him unconscious, causing a scene at the bar and necessitating a change of plans. It could even make him violently ill and send him running to the bathroom — an easier mess to clean up, perhaps. If you prefer a more hands-off approach, all of this uncertainty could be avoided by getting the ICA to plant a sniper rifle in the grounds of the venue, but you'll still need to acquire it, find a good position and wait for the right moment.

Every single NPC is vulnerable to a broad spectrum of actions and, in cases with greater ambiguity than a shot to the face, will exhibit a complex range of reactions — a boon given that Contracts mode, where anyone could be your next target, returns. As such, the game constantly keeps tabs of everyone on the sizeable map. Create an explosion in one

"We talk about levels being Swiss cheese: there's always a place to blow holes through"

corner of the estate, and the revellers on the opposite side are as likely to hear it as the guards close by. As a result of this simulation, *Hitman* also drops *Absolution's* checkpoints.

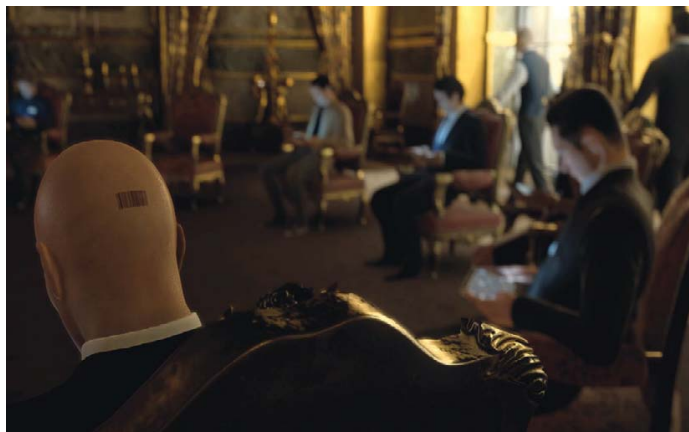
"If a model or a stylist goes missing, the stage manager will just find a new one," says Elverdam. "If you kill everyone, it's going to be a pretty empty fashion show, but it's not like the whole thing breaks down because one of them goes missing. [The game is] very robust on every level, and we need to be, because you're completely free to do what you want."

And this drive to free Agent 47 from the smattering of restrictions placed on him in the past includes the ability to clamber up drainpipes. "Building traversal is now a legitimate strategy. It's not like we're doing full parkour, but we wanted that to be an element as well," Elverdam says. "We talk a lot about our levels being Swiss cheese: there's always some place to blow holes through, and it should never feel like there are dead ends. There'll never be a place and time where you feel like you came to the end of the line." ■



Creative death

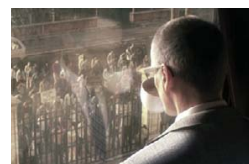
While Agent 47 has been growing steadily more capable over the course of the series, Io-Interactive is switching focus for *Hitman*. The bald assassin's new parkour abilities certainly open up new options, but it's his selection of gadgets that really count. "We've moved away from trying to create new abilities for Agent 47, since we want tools and planning to be a bigger part of the game," Elverdam explains. "You have a loadout and obviously whatever you bring into the level with you is also a choice that you have to make. We want *Hitman* to be more of a creative game, about figuring out what's going on."



TOP Clambering up to a sniper spot might give you the advantage over your target, but you'll still need to have a handle on their movements through the level to be effective.

RIGHT You might choose to bring Novikov's life to a close subtly and out of sight, but if you want to make more of a show, you could just bury a fire axe in him, or contrive a way to bring his own set down on his head.

MAIN By day, the venue for the fashion show is a museum, so it's filled with alarmed display cases – useful for drawing attention. But even an ill-planned silenced pistol shot could result in unwanted curiosity and an on-the-spot frisking



TOP Having a VIP invitation to the fashion show might enable you to move among the guests and hosts freely, but we're still not sure why nobody ever thinks to question 47 about the barcode on his head.

ABOVE *Absolution* could sustain 40-odd characters between checkpoints, while *Hitman* can simulate around 300 simultaneously with no checkpointing. Among those 300 will be plenty of marks



Bar a new gilet featuring lines of crimson thread, and the complex wrist brace on her right arm, Faith's design has barely changed since 2008. It didn't need to: her look is as distinctive today as it was upon her debut





H | Y
P | E

MIRROR'S EDGE: CATALYST

To tell Faith's origin story, DICE strips away city edges to give her the run of the place

Publisher	EA
Developer	DICE
Format	PC, PS4, Xbox One
Origin	Sweden
Release	February 23, 2016

The opening sections of *Mirror's Edge* did a fine job of disguising their linearity, but freerunning protagonist Faith never seemed as if she should be constrained at all. *Mirror's Edge: Catalyst* addresses that longing for a lack of boundaries by giving her an entire city's worth of rooftops to dash across and buildings to infiltrate, and the rush of doing so is enough to put mission objectives firmly to the back of your mind when you start playing. Moving Faith, a character always meant to embody the joy of unrestrained locomotion, feels better than before.

There's no run button; Faith just runs, building up speed the longer her flow stays unbroken. The left shoulder button performs any moves that will take you closer to the sky above this gleaming white city — including wall runs, and clambering up ledges and pipes — while the left shoulder button is used to roll out of big jumps, slide and drop down. It's a setup that encourages you to navigate instinctively rather than worrying about the minutiae of your route, and one that works particularly well with Faith's origin story.

"[In *Catalyst*], Faith will go from an untested runner to a really good one and beyond," design director **Erik Odeldahl**

explains. "So it's important to me and the team that the player learns along with Faith. We don't want to start the game saying that Faith is the best runner in the world and then the player isn't, so we need to give them time to learn and find their way."

The original used tightly designed linear obstacle courses to maintain its sense of momentum, of course; surely there's a risk of eroding that flow in an open world, where even the most dialled-in players will have to stop and take stock of their surroundings occasionally? Odeldahl isn't worried about asking you to pause to drink in *Catalyst*'s skyline every now and then, especially given the longterm benefits he sees in learning the city and perfecting your lines.

"When you enter a new space for the first time, it's natural to stop, look and think about your options," he says. "'Where can I go? Where do I want to go?' And, for me, *Mirror's Edge* was most fun when you traversed a space the second or third time; the more you know about a space, the better it is. And that's what I like about the whole free-roaming aspect of *Catalyst*: you move across these spaces from different angles and [to different] ▶



MIRROR'S EDGE: CATALYST



Technology plays a big part in *Catalyst*, whether it's manifest in the wearables that help to subjugate the population at large or tied into the elegant architecture of the so-called City Of Glass



Erik Odeldahl, game design director

waypoints a lot, which means that you learn them. It means there's a puzzle element in finding the optimal route at first, but after a while you become really fast because you know the space so well. That sense of flow is definitely at the centre of [the game]."

It's infused into the combat, too. This time around, as long as you keep Faith moving and chaining moves together, she's untouchable, every bullet flying wide of the mark as you disorient, disarm and incapacitate your enemies one by one. Her attacks are split into two main categories: Flow and Transference. Opting for the former style maintains your own momentum, while delivering a strike of the latter variety will transfer that energy into your target, flinging them across the level. The result is a version of Faith too effective to bother with firearms, and as such that aspect of the first game has been stripped out.

"We didn't want the kind of flow-breaking combat that we had in the first game," says Odeldahl. "And early on we – from a story and world perspective – decided we didn't want Faith using guns at all this time. So once we took that out, we moved Faith's entire moveset piece by piece over from Unreal Engine to Frostbite and then went through countless iterations. We knew what we wanted, but it takes time to get there. Firstperson melee is hard [to program], especially if the player is moving at full speed. So we basically came to the conclusion that we can't borrow from other genres. We need to focus on our core strength, which is firstperson freerunning. So we decided to make combat part of the freerunning."

That all makes perfect sense from Faith's perspective, but such a design requires AI with a very particular set of skills. "We can't do FPS-type AI, really; the enemies have to behave differently," Odeldahl says. "The AI really has to know which direction you're looking and moving in, and the speed that you're moving at. But if they were to just always line up in front of you, that wouldn't be very interesting after a while. So, of course, [we use some] tricks to avoid that."

We only encounter enemies briefly in our demo, taking down three or four faceless aggressors during a courier side mission

before a thirdperson finisher move signals that they've all been bested. Still, the combat certainly feels dynamic and the weaponless Faith somehow retains a sense of vulnerability despite utterly wiping the floor with her foes. Her finishing moves are said to vary according to how you bring each fight to a close, but DICE isn't ready to discuss the details of that system just yet.

What it is prepared to show are two other side mission types: one in which you must find your way to the top of a huge building in order to hack a billboard so that it displays Faith's tag, and another that asks you to race along a particular route against the clock. In all three cases, Runner Vision will present route options, but getting this augmented sight mode to work in an open world has delivered a headache all of its own.

"We had to redesign Runner Vision completely," Odeldahl says. "We still wanted

"We didn't want the kind of flow-breaking combat that we had in the first game"

to keep that 'follow the red objects to get to your objective' [guidance], but since we can't really know now which objective the player wants to go to, we let them place a waypoint on our 3D map. Runner Vision now works kind of like a GPS, in that it continuously recalculates a path for you from where you're standing at the time to where you want to get to. And that obviously took quite some work, and we're still refining it now."

Despite the game clearly not yet living up to the team's vision of it, and the fact that it has only opened up a small portion of the city to outsiders so far, *Catalyst* already presents a tantalising glimpse of how freeing an open-world *Mirror's Edge* could be. And the studio has promised that by release the City Of Glass will be a large open world not broken up by loading screens, which ought to help maintain the relentless sense of momentum that won over fans of the original. Transferring *Mirror's Edge*'s tight parkour to a space in which the player can call all the shots is a leap of faith, certainly, but DICE looks likely to land it. ■



Glass ceiling

Catalyst's location, entitled the City Of Glass, has been made according to a strict set of rules and metrics, which are meant to ensure every surface is readable. "I'm a firm believer that you create your framework and then you move inside of that – that makes it way easier for designers, level designers and artists to work," Odeldahl explains. "But we also gathered lots of reference material so that we could make the street grids believable, so that it feels like a real city. But unfortunately, cities don't have metrics, so that's problematic. It's all about finding a good compromise between what reads well from a distance, and what reads well close up. It takes a lot of work, but it's fascinating."



TOP The armoured Kruger Sec forces seen so far call back to the original game's Pirandello Kruger private security company, though goons are considerably more stylish this time around.

MAIN The revised combat is dissimilar to other games, emphasising movement, positioning and speed over the point of contact as you flow from enemy to enemy.

RIGHT The game opens with Faith being released from a detention centre, so the freedom to go wherever you want is particularly poignant



TOP Moving through the environment at full pelt is a dizzying rush. By contrast, Faith feels a little ponderous as she builds up speed.

ABOVE The announcement trailer offered glimpses of Faith's past, her relationship with her sister and those who will guide her in her fight, but all that's confirmed so far is that DICE views this as an origin story, and that Faith meets up with the subversive Runners shortly after she makes bail

H | Y
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FOR HONOR

Ubisoft takes a swing at something different in this game of multiplayer sword duels

Publisher	Ubisoft
Developer	In-house (Montreal)
Format	PC, PS4, Xbox One
Origin	Canada
Release	TBA

When Ubisoft Montreal needed help with *Watch Dogs*' driving model, it enlisted the services of *Driver: San Francisco* studio Ubisoft Reflections. Sweden's Ubisoft Massive has recently brought its multiplayer-specialist stablemate in Annecy, France, on board to help with *The Division*. Ubisoft's greatest asset is its studio network, a global spread of genre and functionality specialists able to provide expertise when required, although the downside is that it contributes to a highly familiar house style across its games. *For Honor*, however, is that rarest of beasts: a new Ubisoft game that bears no immediate resemblance to anything in the publisher's back catalogue, borrowing no mechanics or assets as the team puts together something that – in the context of this company's output at least – is unique.

Beyond those boundaries, there are touchstones aplenty. Naturally, a multiplayer sword combat game recalls *Chivalry: Medieval Warfare* (which *For Honor* creative director Jason Vandenberghe backed on Kickstarter). Mapping light and heavy attacks to the right shoulder button and trigger respectively feels like a nod to *Souls*. The Dominion mode we play is a riff on *COD*'s Domination. And in its three-directional sword combat system, dubbed the Art Of Battle, there is a whiff of *Nidhogg*. That's a rare mix of influences for

any game, let alone a Ubisoft one, but its original concept preceded the lot of them.

"About 12 years ago, I was taking a course in western martial arts," Vandenberghe says. The course in question? Medieval sword combat. "I was at home one day, thinking about the patterns I'd been learning, and just started thinking about controls: what if we mapped this style onto a right stick? The control scheme just clicked. I got excited, and started pitching it to anyone who'd listen. For a decade it was just, 'No, no, no.'"

"It was a different time: *Lord Of The Rings* was just happening, we didn't have *Game Of Thrones*, the mainstream audience just wasn't there. And we didn't have the tech to do it. Thirdperson [games] were very different 12 years ago."

Vandenberghe had been with Ubisoft for a few years when he pitched his idea to Yannis Mallat, CEO of Ubisoft Montreal, who was the first to not say no to the concept outright. Instead, Mallat introduced him to the team that made *Naruto* games. Work on *For Honor* began, and with so little precedent to base it on, all the team could do was experiment. "We [made] 400 prototypes over the course of this thing," Vandenberghe says. "We made a whole bunch of Flash demos, a bunch of random crap where we were just exploring. I still have them all – I kept the whole library." ►



Jason Vandenberghe, creative director



While *For Honor* casts players as either Chosen (samurai), Warborn (Vikings) or Legions (knights), you're afforded a good degree of control over how you look, choosing not only from various armour options, but deciding your gender, too



FOR HONOR



The map on which our demo is set, Harrowgate, is built around a crumbling castle – presumably home ground to the Legions. Expect other maps to suit Vikings and samurai, though it's not yet clear how Ubisoft Montreal will knit all three together in the context of a campaign

Four hundred prototypes later, *For Honor*'s sword combat is weighty, purposeful and satisfying. Squeeze L2 and you enter Guard mode, from which nudges of the right stick either raise your sword to head height or hold it by your left or right hip. This dictates not only the direction of your attacks, but your defence; as in *Nidhogg*, incoming blows are automatically blocked if your sword is held in the same position as the enemy's swinging blade. There are other elements in play – you can nudge the stick towards your foe and tap Square to break their guard, while Feats are faction-specific super moves – but this is the delicious meat of combat. Blows connect with a sickening crunch, and parries are rewarded by a lascivious clang. It is a purist's loving celebration of sword combat, something that in too many games is simply seen as a thematically appropriate means to an end.

It's a concept that extends to Dominion, which presents you with three zones to capture and feels at first like a straight crib of *COD*'s Domination, albeit one in which the four player-controlled characters on each side are joined by a busy battlefield of AI grunts. Yet when one team reaches the score limit of 1,000 points, there is no win screen, no leaderboard, and no replay of the final kill. Instead, the losing side is put into Break mode, and its players are robbed of their ability to respawn. If the entire team dies, the battle will end, but if a survivor can claim a capture point, their allies will come back to life. You can still earn points during this phase, too, and reaching 1,000 points will break the opposition too. One of our matches ends after a protracted, frightfully tense to-and-fro, the patient flow of sword fights punctuated by desperate Benny Hill sprints to capture points with three bloodthirsty samurai in pursuit. Victory, when it comes, is not shown in stacks of K/D ratios, but in lopping the last enemy's head clean off.

Again, iteration proved to be key. "Originally, Dominion would end on points," Vandenberghe explains, "and I was like, 'Surely we should end the match on a decapitation? That's how every match should end: the big one dies and everyone else runs, right?' We wanted the endgame to always result in those

personal duels; someone personally wins the match and the battle. That back-and-forth tug is awesome, but it was an accidental discovery that grew out of our trying to always end a match with a sword move."

Vandenberghe says Dominion has been the heart of *For Honor* since early in production, making it the logical choice for the game's cotillion. Other gametypes will feature – with bot support in place for those wanting to stay offline – and there will also be a campaign mode and co-op. An eye-catching inclusion is splitscreen multiplayer, which has long been out of fashion. "I don't get it," Vandenberghe says. "I think it's amazing, especially for a game about swordfighting. It's a personal experience, right? I want to fight my friends, and I want them to be there when I do."

It is, of course, not without its problems. The creeps, if we can transplant MOBA terms to Medieval times, clutter the screen, blocking

"That back-and-forth tug is awesome, but it was an accidental discovery"

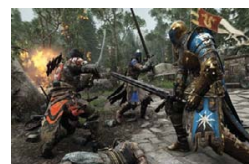
your path and attracting blows intended for other targets. Battles are meant to be chaotic, of course, but the AI and UI (which highlights capture points but doesn't show your allies) combine to make the game a little hard to read at times. Still, such complaints are dulled in the face of a combat system this satisfying, and a publisher renowned – often demonised – for its lack of invention sanctioning such a dramatic departure from its norms.

Both are down to Vandenberghe, a charismatic figure with enough enthusiasm to power a game conference on his own, who has spent 12 years getting *For Honor* out of his brain, into development and onto Ubisoft's E3 stage. "I've been freed from my inner demons," he says. "This is my bucket list game, the game I've always wanted to make." There may have been no precedent for this sort of thing in Ubisoft's past, but you suspect that is precisely why the publisher is making it. In years to come, when another Ubi developer puts a sword in a protagonist's hand, it'll be Vandenberghe they go to for help. ■

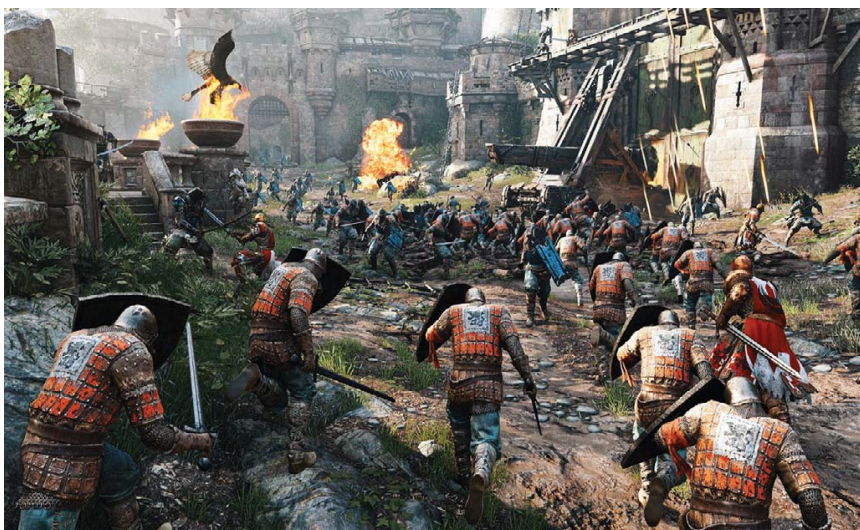


The magic number

At one point, the game had four sword positions instead of the current three, but the team found that a low stance just asked too much of players. "When we looked at the stats, only 17 per cent of attacks were low, and only ten per cent of successful blocks," Vandenberghe says. "I think it's a brain problem. I think humans just don't expect to be attacked from the ground like that." That, and videogames' enduring love affair with the rule of three, saw the low position sliced off. "The goal is to reduce the mental load so people can play it. It doesn't mean the game has to be simple – it means there are certain kinds of complexity that we [as developers] have to avoid."



TOP Spawn points are fixed, and respawns are subject to a short delay, though the former are a few seconds' sprint from the fray and the latter will only keep you out of action for a few more. Taken together, both are still enough to mean kills count for more than keeping score. **MAIN** When an enemy player draws near, the camera shifts to frame their approach, signalling it's time to stop merrily slashing at creeps. **RIGHT** We've become pretty accustomed to online multiplayer games being soundtrack by rattling gunfire and loud explosions, so *For Honor's* cacophony of shouts, screams and war cries is a welcome change in tone from industry norms



TOP While you could simply mix up light and heavy attacks (but will want to kill with the latter to trigger a finishing move), you can also perform more complex combos. **Factions'** super moves, meanwhile, see arrow storms and artillery strikes called in from afar.

ABOVE CENTRE This knight is near the C flag, which is one of the map's easier points to hold thanks to its height. Reaching it means climbing a ladder knowing an enemy is likely waiting at the top.

ABOVE While single combat is tense, a lopsided two-on-one mismatch is over in a flurry of blades. You can switch which target you're locked onto by releasing and quickly re-squeezing the left trigger, but only the highly skilled will be able to take down two opponents alone

Publisher Microsoft
Developer Turn 10
Format Xbox One
Origin US
Release September
15 (NA), 18 (EU)



FORZA MOTORSPORT 6

Forza 5's crash data is helping Turn 10 build a better racer



Forza Motorsport 6 comes across as an apology to fans who felt let down by the previous entry in Microsoft's flagship racing series. Dispiritingly undernourished, *Forza 5* was stymied by its dash to this console generation's starting line and full of irritating design decisions such as unskippable Jeremy Clarkson blather, intrusive microtransactions and an excessively slippery handling model that seemed to hold Hollywood chase sequences above track-day drama.

Things are looking considerably healthier this time around. In fact, Turn 10 says *Forza 6* is the biggest game the studio has ever made. While the raw numbers don't fully bear that out, there's plenty to be excited about: 450 fully customisable Forza Vista cars, along with 26 environments (ten of which are new), over which will be draped a promised 70-hour Stories Of Motorsport career – featuring more than 80 smaller Showcase events alongside the main races – and a 24-player online multiplayer suite built around the newly introduced division-based Leagues mode. And this time, everything runs at 60fps in 1080p. Best of all, *Forza's* signature handling model has been restored.

"We're always listening to feedback, not only from the community but internally as well," creative director **Bill Giese** tells us when we ask about the cars' reestablished traction. "And we're always getting data from our manufacturers. Because we have such a diverse list – we've got pre-war race cars, trucks, classic muscle – we've had to overhaul all of our tyre compounds. [And now] you're going to need rain tyres!"

The precipitation in question is made up of individual, physically simulated raindrops that move across your windscreen in a highly convincing manner. But Turn 10 has taken things further by calculating the porosity of the more than 140 driving surfaces that the game uses, simulating the way that water accumulates on different materials, or, for example, how rumble strips are sticky in the

dry but slick when wet. And 3D puddles will also form on tracks (which appear in predetermined locations based on the pooling zones of real circuits), with friction, drag and elasticity all calculated as you car barrels into them and risks aquaplaning.

"A good example of our drivable surfaces is Sebring in Florida," Giese explains. "It's built around an old airfield, so they've got concrete as well as asphalt. The older sections of the track butt up against the newer sections, and in that transition they just slop a sealant over the top of it. In *Forza 6*, even that sealant has different [driving] properties."

There are now night-time races, too, and the same attention to detail has been applied to the Tarmac, grip diminishing in the cooling night air. Turn 10 is also trying to capture the atmosphere of racing in the dark. "There are tracks like Yas Marina that are so artificially lit up that it feels like daytime, but then there are tracks like Le Mans where the back stretch is pitch black," Giese says. "You get this sense of claustrophobia, because all you have is this cone of light to guide you, and we talked to race car drivers who said that's the scariest thing. Hopefully you can catch the turn up ahead; hopefully there's a car in front and you can watch their brake lights. We really wanted to create that emotion for the player when they're racing."

Turn 10's promises, along with the brief time we've spent lapping a handful of night-time, wet and daytime tracks, suggest that the studio has rekindled the spirit of *Forza 3* after briefly losing its grip. Cars feel weighty and responsive, and there's a gleeful nod to '90s arcade racers in the bright colours, sweeping views and low-flying airliners of the new Rio de Janeiro track. Those puddles deliver, too, the game conveying the thump of hitting standing water at speed. With the pressure of creating a launch game behind it, the studio now looks set to deliver a *Forza* on Xbox One that's more deserving of the series' name. ■



Friendlier rivals

Forza 6's AI is built on the latest iteration of Turn 10's Drivatar technology, and combines data from both *Forza 5* and *Horizon 2*. This has led to some surprising behavioural advances, such as cars late breaking or locking up a single wheel in corners – techniques the team didn't expect to see its *Forza 6* vehicles employing. But *Forza 6* will also allow you customise how the grid behaves by switching off aggressive behaviours if you'd rather not deal with the pack's less sportsman-like qualities. "I'm one of them," Giese says. "I've been at the studio for ten years, and I don't give a shit – I'm a terrible driver and I'm going to try to win. [But in *Forza 6*] you can just say 'ignore' and it'll essentially neuter [my Drivatar] so I'm not as aggressive."



Turn 10 creative director Bill Giese

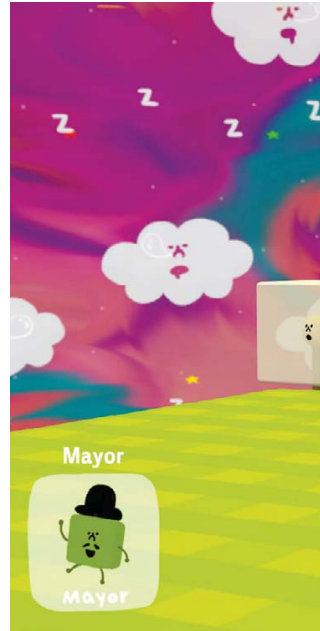


TOP The various properties of *Forza 6*'s redesigned road surfaces are communicated particularly well through the more powerful rumbling of Xbox One's Elite controller, and those paddles will be perfect for quick shifting. MAIN Cars, especially powerful rear-wheel-drive models, handle differently in the wet, but stay compliant if treated with due respect. RIGHT Since the new Ford GT isn't due to be released until 2017, Turn 10 is working with Ford to get the car's handling on point. "There's a lot of things that we're still learning," Giese says



TOP Though the game's weather is dynamic, rainy days are restricted to locations in which they makes sense; Rio de Janeiro, for example, won't get slippery at any point. And the 3D puddles will always appear in the same places. ABOVE "We learned a lot from the development of *Forza 5*," Giese explains. "We've overhauled our entire economy. There'll be no tokens at launch, and the economy is all based on the credits you earn, and making it feel rewarding"

Publisher/developer
Funomena
Format PS4
Origin US
Release TBC



WATTAM

Funomena rolls out the latest idea from Katamari Damacy's creator

We're as surprised as you to hear that *Katamari Damacy* and *Noby Noby Boy* creator **Keita Takahashi** has decided to curb the eccentricity of his latest game a little. "I understand that *Noby Noby Boy* was too much for some people," he says with a grin, "so I just tried to find the middle ground. And that's *Wattam*."

Don't worry, *Wattam* is still delightfully odd. It follows a little cuboid mayor and his efforts to repopulate a town in the aftermath of a surreal cataclysm. You'll frolic and clamber about, experimenting with each new resident's abilities to create ever-larger people explosions (not a metaphor: characters soar into the air and go bang), which bring joy to potential residents and Funomena's curious sandbox to life. It sounds, and looks, bizarre, but it's an instantly arresting and entirely charming proposition once you get your

hands on the controller. And Takahashi's right: it really does feel like a happy mix of the best elements of his best-known games.

"You have that really structured time-based gameplay with *Katamari*, which I think Keita felt was a bit too [constrained]; then there's the open-ended playspace of *Noby Noby Boy*, which is kind of Keita's dream, but for me felt a little unstructured," Funomena CEO **Robin Hunicke** explains. "You can play *Wattam* in the way you would play *Noby Noby Boy*, or if you want to play it as you would play something more directed, you can. Then in the middle of those two styles is a game where you sometimes play the story, and then sometimes take a break and experiment with the characters... It's a conscious decision."

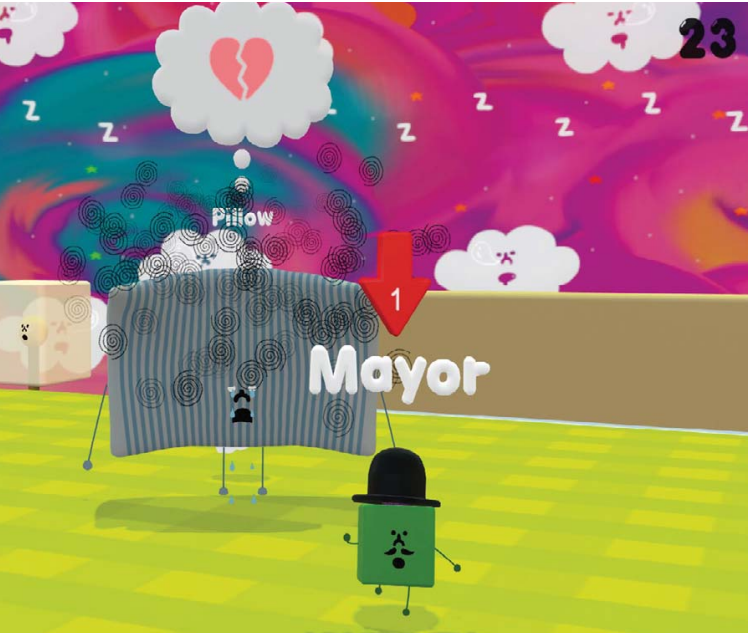
Ironically, that conscious decision has resulted in something that feels dreamlike,



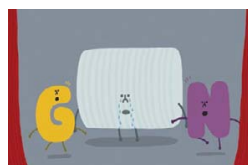
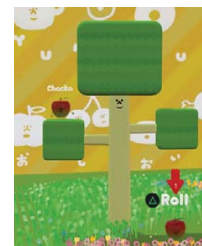
Funomena CEO Robin Hunicke and *Wattam* lead Keita Takahashi



The movements and connection of the characters' limbs and tiny hands are captured wonderfully, and there's a real sense of climbing the variously shaped stacks of people



LEFT Poor Pillow – he just wants to hold hands. Sadly, anyone who touches him will instantly fall asleep. BELOW The development build currently supports four players locally, but things get chaotic. “I’d love for there to be a fourplayer sumo mode,” Hunicke says



“The first year was a lot of conceiving and struggle,” Hunicke says. “But in the past six months, a series of positive events has pushed development forward with tons of momentum”

though surreal, disparate elements somehow fuse into a whole that makes sense within the context of play. For example, explosions are triggered by a bomb stored under the mayor’s bowler hat, but first you must stack a certain number of characters on top of each other, switching control between those you’d like in the detonation until the swaying tower reaches the requisite number of bodies. Hold down the bomb button at this point and the group will take off in a swirling formation, leaving trails behind them as the skies light up, which encourages yet more residents to move into your town. It’s a manifestation of unrestrained joy – the satisfying culmination

Seeing how each character’s abilities affect others is an open-ended distraction

of each delightful experiment that preceded it. It feels apt for a game with only a passing interest in traditional design principles.

“I think at the very beginning, we bit off more than we could chew,” Hunicke says. “We tried to write a physical solver that would allow us to have stretchy, bendy attachments between characters, so all the stacks could be really wobbly, because we wanted to get that sensation of Jenga-esque teeter-totting. Then as we iterated on it, and we realised we didn’t need all that power. We just needed to make the characters appealing and childlike. So instead of spending a significant period of

time developing that physics system, we invested more time in AI behaviour and animation that allows us to put a lot of character into each person that’s in *Wattam*.”

They’re a memorable lot. Take the coffee bean: he can run really fast, but also wake up dozing characters who succumb to the Midas-like curse of a lonely pillow who puts to sleep those he touches. The cloud can float around and rain on grass to grow flowers, a bunch of which can be plucked and added to your character list. Then there’s the piece of sushi with the jetpack and the turntable who can start a party anywhere. Mucking about and seeing how each person’s abilities affect those around them is an amusing, open-ended distraction, and some add a puzzle element to creating stacks once you choose to press on with the game’s loose objectives.

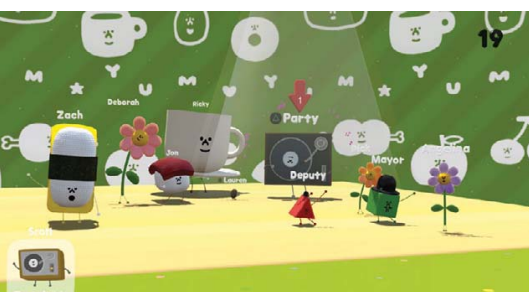
There’s still plenty to firm up, but while Funomena is allowing the game the space it needs to evolve naturally, the ideas at the centre of it have remained core to Takahashi’s vision, inspired by watching his children play. “[It’s been] two years, and it’s not finished yet,” he says, “but my concept, my idea, hasn’t changed. It’s very clear, I guess. Maybe [it’s because] it’s so crazy...”

“The lock screen on my phone right now is Keita and his son playing the game!” says Hunicke. “When he was two years old, they were stacking stuff and playing with wooden blocks, and Keita started doing stuff that was pretty crazy with them, and the kid was laughing and responding really positively. Now he’s four, and he can play this game! So when we finish, he’ll be five, and Keita can say, ‘Hey, I made this for you!’ I think that’s the best thing a parent can give to a child – something that’s really inspired by them.” ■

A plan for all seasons

Our *Wattam* session is spent in a world with a springtime theme, but the plan is to have levels based on the other three seasons, too. The team is also considering building in a sandbox mode, though it is aware of how much it has left to make before that’s possible. “We’ve talked about there being something more open-ended,” Hunicke says. “Right now, our goal is to make as many adorable, charming and interesting characters and environments as possible; then maybe we’ll be inspired to create a sort of ‘people salad’ level where you can just bring in anybody. It’s hard to say, because now is the time when the game shows us what it needs.”

Starting a party is easy, and everyone in range will break out their best dance moves when needle touches vinyl. Despite their simplistic designs, characters are unfailingly charismatic



Publisher/
developer Capy
Format PC, Xbox One
Origin US
Release 2016



BELOW

Capy gives new meaning to the pen-and-paper RPG

We're bleeding. Our avatar might only be a tiny presence onscreen, but it's pretty obvious we've been cut. There's the trail of blood, for one thing, which has already been set upon by a group of leeches. *Below's* UI is sparse by design — invisible, in fact, unless there's something you need to see — so there's no ignoring the sudden appearance of a heart slowly being drained of its ruby-red hue either. We should probably do something about this.

We bring up the menu. On it, we see all the items we've gathered so far: carrots, fish, sticks and strips of cloth. We look for a recipe of some kind — perhaps we can make a potion to staunch the flow and top up our health, or cobble something together to patch us up. All those things are possible — and in our current state, highly advisable — but there's no recipe menu or auto-crafting option. All

we can do is experiment, using or combining our meagre wares in the hope of finding an answer before we bleed out.

When we find a remedy, no shortcuts or memory aids are logged — we'll simply have to remember it for next time. The same goes for soups, brewed at firepits and used for healing, curing status effects and bestowing buffs. "There's a hint system for those paying close attention, but a lot of it is just trial and error, figuring it out," Capy president **Nathan Vella** explains. "It's very much about players discovering these things for themselves."

FromSoftware's games are a key reference point for Capy, and this crafting system is a natural, elegant fit for the ethos. Much like *Dark Souls*, death sees you respawn with your earnings left on your former body, those gains disappearing forever if you fail to reach it



Capy president
Nathan Vella

While you can only brew soups at firepits, other forms of crafting can be performed anywhere in the world. It's a necessary concession, given the bleeding system and the need to top up ammo supplies while on the go





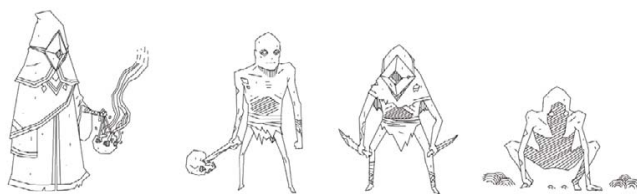
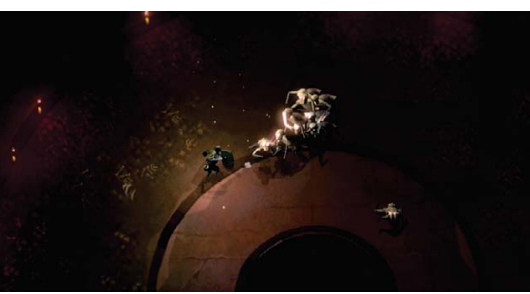
The landscape is procedurally generated anew every time you die, although the overall shape of the world is persistent and certain key landmarks stay in place. If heading down, left and down from the start takes you to a washed-up shipwreck on one life, then the same will apply when you respawn

during your next life. Here, as in *Dark Souls*, the only thing that persists is what you learn along the way. When *Below* is finally released — announced at E3 2013, Cappy is targeting a launch late this year or early in 2016 — you'll want to play it with a pen and paper to hand.

There are nods to FromSoftware in the combat, too, albeit fewer of them than when we previously checked in on the game. An early dodge-roll has been replaced with a dash, largely for aesthetic reasons; a stamina system that caused you to tire after a handful of dodges has been abandoned because Cappy felt it was too punitive. Fighting is weighty, deliberate and uses both sticks, the right one rotating your character when their shield is raised. In addition to the traditional suite of light and heavy weaponry — only one item of which can be carried at a time, chosen when you spawn and with you until you die — your bow and arrows provide a ranged option, a line showing a shot's trajectory extending the longer you hold your aim. But while combat may be steadily paced, your character never feels forcibly slowed down. "You're supposed to be nimble, for sure, but every [individual] movement should not feel quick," Vella says. "It's an interesting balance, and I think partly that comes from having time with the game to figure that out."

Indeed, appropriately given the subject matter, Vella and Cappy have worked on *Below* in the shadows, shying away from the expo circuit in a bid to ensure the studio's biggest, most complex game to date achieves its

Despite the small size of your avatar, the action is clearly readable both in and out of combat. Clearing the screen of clutter, with a UI that only appears when you need it, further reinforces the sense of being lost in a vast, foreboding world



potential. "The same thing has happened with a bunch of our games," Vella says. "We really love it for the first 30 to 60 minutes, then we find that love decreases and we realise we have to figure out, 'How do you make a game that isn't just fun in demo form?' We had to do that on *Super Time Force*, we had to do that on *Superbrothers: Swords & Sworcery*, and now it's just part of the way we build our games."

The major change that the past 12 months of silence has brought is a lantern. It's not the only portable light source in the game — you can craft torches — but it's certainly the most important, not only illuminating the world but also revealing its secrets. With it in hand, a glowing signal appears on the ground to alert us to a tripwire; later, a mysterious cave drawing appears on a wall. While death means a new hero with their own sword and shield, there will be only one lantern in the entire

"Everything can be used for something, but you don't need to use any of it"

game — a point reinforced when Vella, with lantern equipped, brings up a debug menu, level-skips to some catacombs, dies, and then apologetically hands us the controller.

Shortly after, we're lining up an arrow shot when our avatar is surrounded by bats. We can kill them for meat, use their wings to craft arrows, or leave them be, just as we could have ignored the fact we were bleeding earlier on, just as we could play the whole game without the lantern's magical assistance. As Vella puts it: "Everything can be used for something, but you don't need to use any of it."

For all the elegant intricacy of *Below*'s systems, many of them will be missed, or can be ignored; it's an uncommonly restrained line of thinking at a time when so many games appear terrified of you missing a trick. When it was first revealed, *Below* was the standout of a slender lineup of indie games on Xbox One. Those ranks have swelled during Cappy's time in the shadows, but it remains, whether lit by lantern or not, one of the console's brightest prospects. ■



Jim sessions

While *Below* is yet another departure for a restless, genre-hopping studio, some measure of continuity comes from Jim Guthrie, the prolific Toronto musician who scored *Swords & Sworcery* and Cappy's contribution to Vita/PS3 musical puzzler *Sound Shapes*. "Every couple of weeks, Kris [Piotrowski, Cappy creative director] will take the afternoon and go to Jim's studio," Vella says. "It's this awesome little shed in his back yard — he has this amazing, lush garden. They'll just sit there — Kris plays the game and Jim will play some music. It's really helped us figure out *Below*'s aesthetic: we make something, Jim makes something, we put the two together and realise what needs to change — colours, or visuals, or cues. He's a maestro."



ROUNDUP

WE HAPPY FEW

Publisher/developer Compulsion Games Format PC Origin Canada Release TBA



Our first death comes swiftly, and a little weirdly, as three identically faced villagers appear from behind a wardrobe and take umbrage at our rummaging through a chest of drawers in a dilapidated house. Like much of this alpha build released to Kickstarter backers, enemy types and spawns are in need of a little finesse. The procedural algorithm, with its love of 80-degree slopes in town centres, could do with some work too. The systems, however, are coming together: hunger and thirst to manage, weapons and restoratives to craft, and a host of pedestrians and coppers around whom you must simply try to act cool.

RED ASH: THE INDELIBLE LEGEND

Publisher/developer Concept Format PC Origin Japan Release 2017



With work on his Kickstarter-funded spiritual *Mega Man* reboot *Mighty No 9* complete, Keiji Inafune continues his quest to secure piles of fan money for old, fondly remembered rope. Next? A Kickstarter-funded spiritual *Mega Man* *Legends* reboot, obviously. Kazushi Ito and Masahiro Yasuma – art director and director on the PS1 original – are on board. Inafune is also crowdfunding an anime alongside it, with fans given input on both throughout production.

OUTER WILDS

Publisher/developer Mobius Digital
Format PC Origin US Release TBA



One IGF Grand Prize later, Alex Beachum and Sarah Scialli are working full-time on their charming space adventure with Mobius Digital – Heroes star Masi Oka's studio. We're told there'll be more to do on discovered planets, an improved ship computer and overhauled marshmallow roasting.

ALLISON ROAD

Publisher/developer Liliith Ltd
Format PC Origin UK Release TBA



Konami may have deleted *PT* from PSN's servers, but there's no killing its legacy. Chris Kesler's remarkable-looking, Unreal 4-built homage casts you as a man who comes to in a very English terraced house – all Ikea tables, Argos beds and Boots pharmaceuticals – to find he's killed his entire family.

INDIVISIBLE

Publisher/developer Lab Zero Games
Format TBA Origin US Release TBA



Lab Zero Games' hand-drawn action-RPG draws from Southeast Asian mythology for story and setting, and *Valkyrie Profile* and *Super Metroid* for design. Like Lab Zero's previous game, *Skullgirls*, it's headed to Indiegogo, this time with *Secret Of Mana* composer Hiroki Kikuta on soundtrack duties.

CALL OF DUTY: BLACK OPS III

Publisher Activision Blizzard **Developer** Treyarch
Format PC, PS4, Xbox One **Origin** US **Release** November



Treyarch has freshened up *COD* multiplayer with new specialist abilities, akin to *Destiny's* Supers, affording bursts of power or use of special, highly damaging weaponry. *COD* drifts further from the *Modern Warfare* wheelhouse each year, but when the results are this satisfying it's hard to complain.

TOM CLANCY'S THE DIVISION

Publisher Ubisoft **Developer** Ubisoft Massive
Format PC, PS4, Xbox One **Origin** Sweden **Release** March 8



Two years after its announcement, a hands-on opportunity arrives at last. Inevitably, it doesn't live up to the hype. In fairness, it's hardly ideal demo material, dropping you into a firefight and having you fight the enemy, a confusing UI and wildly recoiling weaponset. Optimism just about prevails.

TRANSFORMERS: DEVASTATION

Publisher Activision Blizzard **Developer** PlatinumGames
Format 360, PC, PS3, PS4, Xbox One **Origin** Japan **Release** Oct 6



With *Scalebound* and *Star Fox Zero* also on the go, it's a busy time for PlatinumGames, though that merely raises fears this is the work of the *Legend Of Korra* team. Perhaps this year Activision will give the studio the time and budget it needs to do justice to a licence for which its talents seem a perfect fit.

MINECRAFT: STORY MODE

Publisher/dev Telltale **Format** 360, Android, iOS, PC, PS3, PS4, Xbox One **Origin** US **Release** 2015



While potentially the most lucrative tie-in to roll off Telltale's production line, this might be the prolific storyteller's most difficult project to date. *The Walking Dead*, *The Wolf Among Us*, *Borderlands*, *Game Of Thrones*: all established works set in vivid worlds. Now it has to work its magic with a game that owes its success to its lack of story or structure. The *Lego Movie*'s success will be a cause of some comfort, as will a voice cast headed by Patton Oswalt.

DESTINY: THE TAKEN KING

Publisher Activision Blizzard **Developer** Bungie **Format** 360, PS3, PS4, Xbox One **Origin** US **Release** September 15



For all the concerns over the content and pricing of *Destiny's* third expansion, the big question is not whether Bungie's new work offers value for money, but what it intends to do with the old. With the Year One gear pool likely to be phased out, players will need more than just a numerical reason to pack their Fatebringers and Gjallarhorns away. Power creep is a given, then, but quite how you top a pistol that makes enemies explode when you headshoot them, or a rocket launcher with heat-seeking follow-up cluster bombs, we're not sure. Though we're certainly looking forward to finding out.

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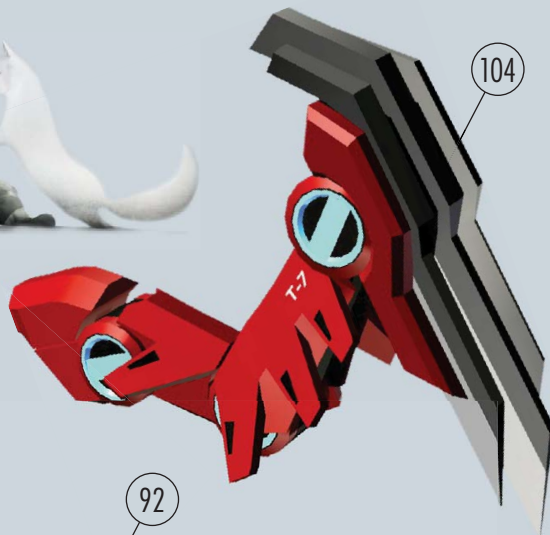
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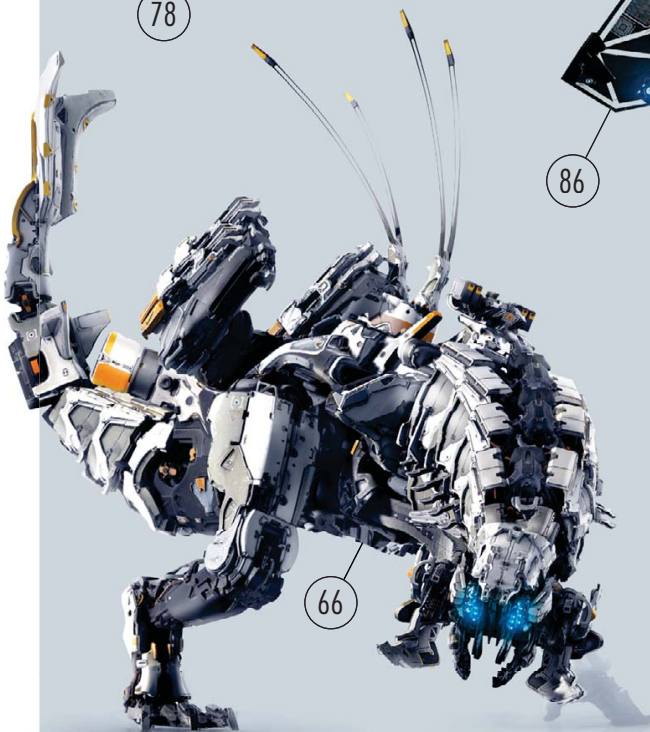
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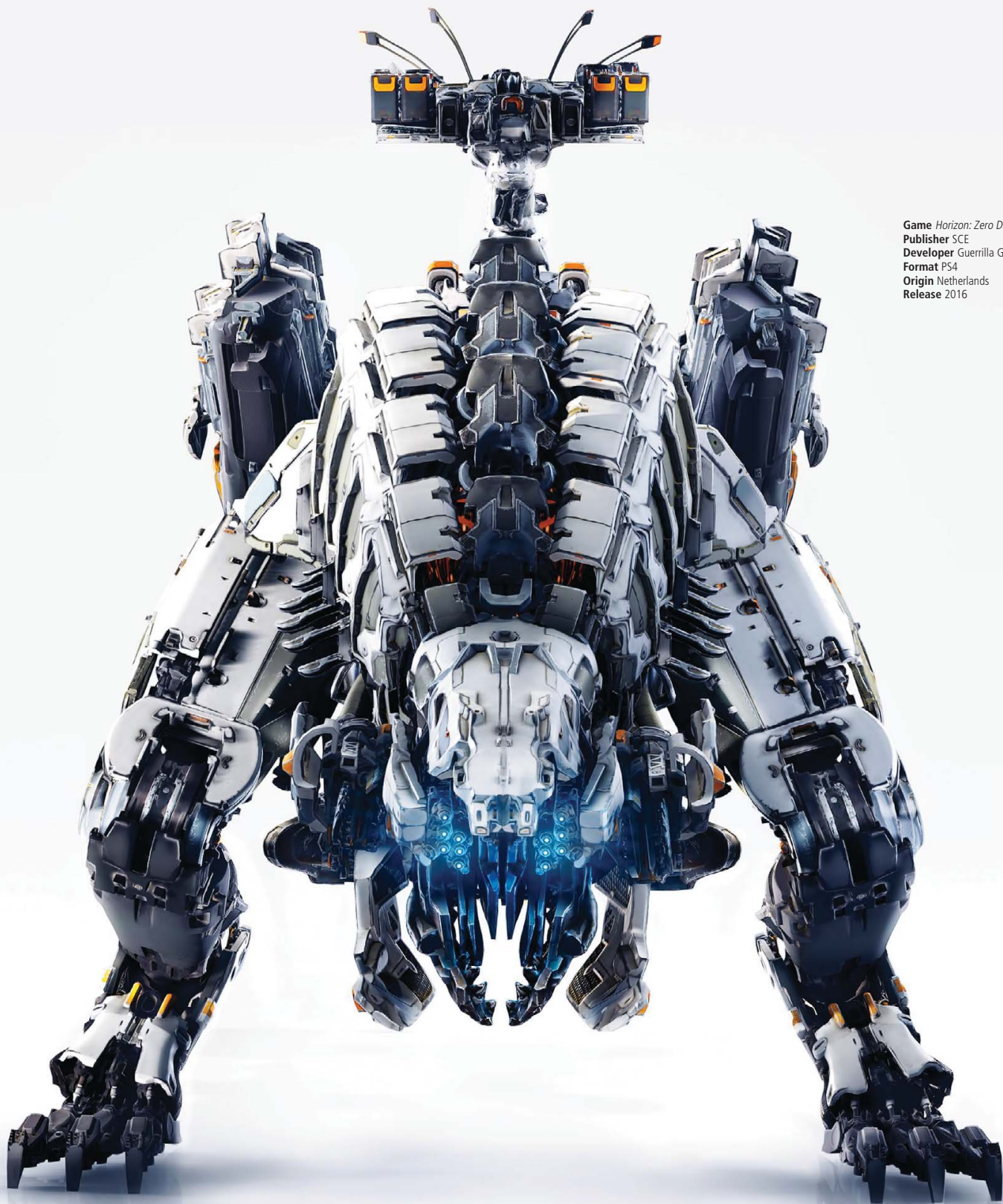


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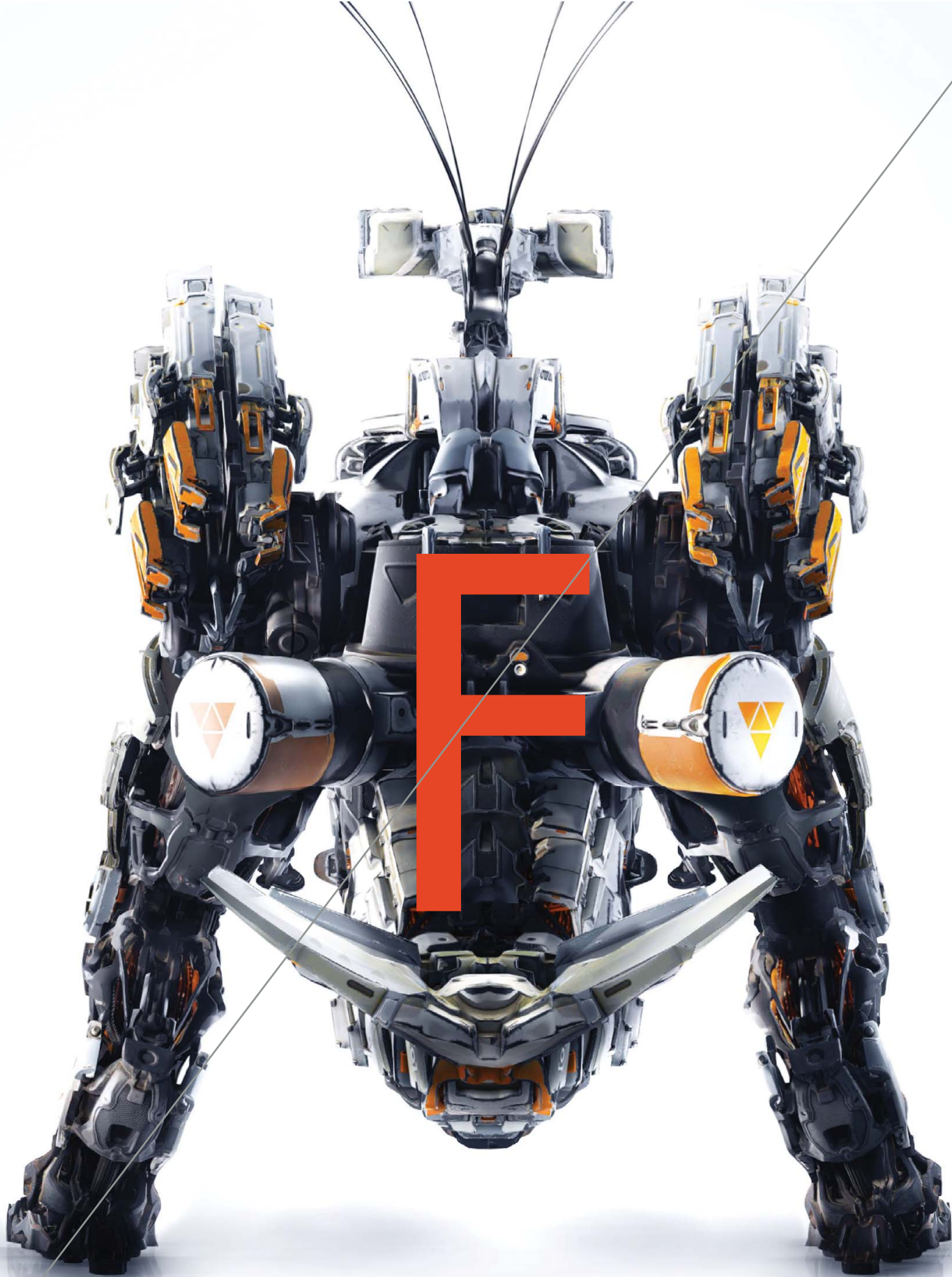
RISE OF THE ROBOTS

The studio behind Killzone is making a very different kind of beast in open-world action RPG Horizon: Zero Dawn

By **NATHAN BROWN**



Game *Horizon: Zero Dawn*
Publisher SCE
Developer Guerrilla Games
Format PS4
Origin Netherlands
Release 2016



our years ago, Guerrilla Games moved offices. Its previous home was a little farther down Amsterdam's Herengracht canal, in the Dutch equivalent of a listed building. No substantial modifications could be made to the structure without jumping through a series of hoops designed to be so complex that there wasn't any point in trying to do so. So the company was faced with a choice: stay the same forever, or go somewhere else entirely.

It chose change, of course, and seemingly developed a taste for it. Four years later, Guerrilla has unveiled *Horizon: Zero Dawn*, a game that has challenged almost everything the studio has learned over its 15 years in business. After releasing five *Killzone* games in nine years, Guerrilla is creating a new IP. After making its name with a series of linear, level-based games, it is crafting a vast, seamless open world. It has shifted from first- to thirdperson view, shooter to RPG, from tight scripting to sandbox systems, and sci-fi to — well, that's where it gets tricky.

As the robotic dinosaur on our cover makes clear, this is still science fiction, but the setting is vastly removed from the intergalactic cyber-Nazi conflict of *Killzone*. *Horizon's* is a world in which animal-like machines freely roam the wilderness 1,000 years after the fall of humanity, a period long enough for nature to reclaim the land from civilisation's steel and concrete. Mankind lives on, but it is primitive, living in small tribes, crafting basic weapons to hunt with. As a concept, cavemen fighting robots after the apocalypse sounds like a bit of a mess. Surely when you pitched that to Guerrilla's art director, **Jan-Bart Van Beek**, he would laugh you out of the room? Whose idea was it, anyway?

"Uh, that would be me," Van Beek admits with a blush. His was one of 40-odd suggestions put forward when, after production ended on *Killzone 3*, Guerrilla's senior management sought the entire studio's input to decide what would follow PS4 launch game *Killzone: Shadow Fall*. The list was whittled down, and just two pitches — Van Beek's, and a combination of three or four separate concepts — were put to a company-wide vote. "We knew [*Horizon*] would be an enormous risk right from the get-go," Van Beek says. "The other project was a bit more in our comfort zone. So we said [to the staff], 'What do you want to do? Do you want to do the big, risky thing that might end all life on Earth, bringing risk to the studio in terms of getting the talent in, getting the technology to work, literally changing everybody's way of working? Or do we stay a little bit safer?' The studio voted for the crazy thing, so that's what we went for. It's been a big, big change."

The result justifies all that upheaval. While the concept may not leap off the page, it sings on a big screen, those disparate, seemingly incompatible elements coming together to produce something that stuck out at an E3 dominated by numbered sequels, remakes and reboots. Aloy, the game's redheaded protagonist, facing off against



With its sweeping natural vistas and world devoid of man-made architecture, *Horizon* is the visual polar opposite of a *Killzone* game. "It has a completely different vibe," says Van Beek. "Going the other way and building these large, natural landscapes is very rewarding"

the 30-foot-high Thunderjaw with a bow, a crude blade and a handful of primitive tools is hardly your typical power fantasy. This is David and Goliath stuff, except here Goliath is covered in armour plating, has five body-mounted weapons, and a dozen different attacks.

Yet a Thunderjaw also has its weak points. One is on its belly, inviting Aloy to sprint straight at it, transition into a slide at the last second, and quickly aim upwards to loose off an arrow. The other is on its flank, protected by some of the 90-plus plates of armour that can be individually knocked free, with arrows to the circuitry

THIS IS DAVID AND GOLIATH STUFF, EXCEPT HERE GOLIATH IS COVERED IN ARMOUR PLATING



FROM TOP Art director Jan-Bart Van Beek; game director Mathijs De Jonge

beneath doing three times the damage of a shot to an armoured body part. Despite its size, a Thunderjaw is lightning fast, kicking up dust clouds as it powers after you, destroying any scenery unfortunate enough to be in its path. But its prey is also fleet-footed and nimble, sprinting and rolling out of harm's way to create the space to line up her next shot.

While the combatants are pacy, then, their battle is surprisingly tactical, thanks largely to the imbalance of power: the hulking robo-dinosaur against the modest, situational potential of Aloy's slender toolset. We're shown footage of a four-year-old prototype — a *Killzone 3* character model running around a low-res world fighting a Thunderjaw that looks like it was made out of Duplo — in which Aloy uses a machine gun. It immediately shows how appealing the core concept is, but also the extent to which it would be spoiled by the sort of weaponry Guerrilla has been using for the past decade and a half.

"What we saw with these prototypes," game director **Mathijs De Jonge** tells us, "was that as soon as you give someone a machine gun, it's just spray and pray. It just becomes a cover shooter. We wanted the player to feel ►



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primitive, so we decided that the tribes would have very limited knowledge of technology. They don't understand what's going on with these machines, or how they work."

They have, however, learned to use some of what the machines will leave behind. Grazers, the deer-like creatures seen in the E3 demo, have transparent canisters of green fuel on their backs, used to craft explosive arrows. They're powerful tools, dealing out hefty damage, but also dislodging armour plating or mounted weapons. That's providing you can line up a shot against a charging robotic T rex, of course, though electric arrows will help with that, stunning the beast, holding it in place for a precious few seconds. The same applies to the Rope Launcher, the only other weapon Guerrilla's wearily modern marketing plan permits discussion of, which can be used to tether the Thunderjaw's head to the ground, eventually pulling it off its feet, or to lay explosive tripwires to reap a harvest from a herd of Grazers. Machines from which these resources can be plundered will be found in specific parts of the world, much as tigers are to be found prowling specific zones of *Far Cry*'s Rook Islands or Kyrat, though randomly generated encounters will cut down on the to and fro. Guerrilla is working, too, to strike a balance between having the resources used to craft the more powerful ammo types be scarce enough to discourage overuse and ensuring you're not left without an essential tool when you need it most. The presence of the Grazer herd to top up your explosive arrows just before the demo's Thunderjaw battle is an example of that, though Aloy's life won't always be quite so convenient. Robot parts will also be available through other means – most likely merchants and traders – though Guerrilla's giving none of those specifics away yet.

Nor is it prepared to show us too much of the world. Replaying the E3 demo, De Jonge turns around at the start, drops off a ledge and shows us some fine water tech, before giving us a brief glimpse of the climbing system as Aloy clambers back to the starting point. Many features were also switched off for the demo in Los Angeles – not because they're not ready, but because colliding emergent systems could have crashed Guerrilla's E3 coming-out party. For instance, the Watcher, a raptor-like machine that

FACING PAGE A pair of these lanky machines show up at the start of our demo. They look like a perfect workout for Aloy's climbing skills.

ABOVE LEFT Given Aloy's vulnerability, stealth is vital. Foliage will be colour-coded to signal what conceals you.

ABOVE CENTRE Dislodged enemy guns are the closest that *Horizon* will get to *Killzone*-style weaponry. Aloy can use them, but their weight slows her down.

ABOVE RIGHT The machines' glowing eyes may seem like a callback to *Killzone*, but it's more about being able to read their intentions

scans for threats and calls for support when it finds one, had its ability to call in backup disabled. Despite such precautions, one behind-closed-doors demo failed to go to plan when a Grazer wandered into shot just as De Jonge was firing an explosive arrow at a far-off rock, the plan being to startle its herd into charging into his cluster of explosive tripwires. The errant beast instead took the missile straight to the face.

That, of course, is the beauty of an open world: things rarely go as either the player or the designer intended. "It's something we'd try to do with *Killzone* encounters as well," De Jonge says. "We had the AI, and the encounter space was set up in such a way that it required very little designer scripting. That was a high-level decision; we didn't want to have things that felt like they were exactly the same every time you played them. By taking out all the scripting and just leaving it up to autonomous AI, you get

"THEY DON'T UNDERSTAND WHAT'S GOING ON WITH THESE MACHINES OR HOW THEY WORK"



FROM TOP Lead producer Lambert Wolterbeek-Muller; senior producer Mark Norris

an unpredictable, highly replayable sandbox. That's what we tried to do with *Killzone*, a linear, corridor-based shooter. In relatively small spaces, it works. Now it's a new challenge! But the principle remains the same, in a way: we don't want designers to specifically script these encounters. Even though now you can approach them from 360 degrees, the principles of level design still apply."

Some principles are the same as those in Guerrilla's previous work. Many more are totally new to the studio. While De Jonge is right to say that those precepts of level design remain true, it's a radically different proposition to build a combat bowl where you can find cover and sightlines from any entry point, rather than just the mouth of the corridor that brought you here. And you can't make a believable open world from such bowls, either, instead designing bubbles for individual encounters that float in the stream of the world as a living, dynamic whole. Pacing those encounters is also a completely different matter in a continuous, coherent landscape driven by systems. De Jonge and team aren't yet prepared to talk about how large the world itself is – though not, it seems, because the ►

marketing plan precludes it, but because Guerrilla doesn't think it's especially important.

"Most studios don't publish their actual numbers," senior producer **Mark Norris** tells us. "*Skyrim*'s super-interesting, because Bethesda released the development kit [for modding], so you can load up the map and see the size of the world. *Oblivion* was 41 square kilometres. *Skyrim* was 41 square kilometres. And they just announced that *Fallout 4* is the same size. They talk [instead] about density, and Mathijs and I have spent a long time talking about content density. How much content can we fit into a world of a certain size, whatever that size might be?"

De Jonge looked long and hard at what makes *Skyrim* work to guide the metrics his team would use to populate its world. Indeed, Guerrilla spent a lot of time looking at other open-world games early on, not for ideas to pilfer, but so it could begin to understand what technology it would need to make. The Guerrilla of four years ago was a studio built to serve one very specific purpose: making *Killzone*. *Horizon* would require a totally different structure, with new teams working in new ways on new tech.

It's been a complex, even painful, transition, but it could have been worse: while new staff with vital skills had to be brought in, Guerrilla managed the process without mass layoffs or hiring sprees. When *Shadow Fall* shipped, as is common across the industry when projects conclude, people chose to move on; rather than seek like-for-like replacements, the studio filled the slots with the staff it would need to make its first open-world game. John Gonzalez, the lead writer on *Fallout: New Vegas* and *Middle-earth: Shadow Of Mordor*, was brought in to lead the writing team; Pawel Swierczynski, cinematics director on *The Witcher III*, joined Guerrilla's new internal cinematics unit. The design team has swelled by about 50 per cent, but the studio itself has not grown by as much as you'd think. Guerrilla now employs 180 staff, a few of whom are still supporting *Killzone*, with another handful playing around with new ideas in secret. *Shadow Fall* was made by a team of 150.

FRESH START

The early prototype we see was produced by a small team assembled after the project had been greenlit, and developed quickly. "I'm a very strong believer in building things as soon as possible," game director Mathijs De Jonge says, "and getting them in colleagues' hands. [Then] we can have a discussion about what we've been playing, and ideally be inspired by what we've created ourselves. I think that's the ultimate thing: if you get inspired by your own creations, then you can go off on your

own track, while still being aware of what other [studios] are doing."

Team size fluctuated according to the demands of the in-production *Shadow Fall*, but one constant was lead producer **Lambert Wolterbeek-Muller**, who joined the company in 2005 and relished the chance to work in a small, experimental team. "I thought it was great," he tells us. "I had this small-company, garage feeling again, like we had an empty piece of paper and could fill it all in with a small group of people. And to



It's a matter more of mindset than headcount, according to Norris, who joined Guerrilla 18 months ago and has previously worked for Capcom Vancouver, Riot Games and Sony Online Entertainment. "The average age, and number of years, at the studio are vastly different to an American studio," he says. "There, if someone's been there five years, they've been there a long time. This is a studio that, not just at executive level but at every level, has people that have been here ten years or longer. There is this huge knowledge base that has really helped."

ABOVE Van Beek says the tribes' primitive look is key to *Horizon's* concept. "It really helps to show how humanity has fallen," he says. "It's not a *Walking Dead*-style story where humanity's still at a contemporary level." RIGHT In Van Beek's pitch, Aloy was modelled on Sharon Montgomery in the 2000 film *Pitch Black*

"HOW MUCH CAN WE FIT INTO A WORLD OF A CERTAIN SIZE, WHATEVER THAT SIZE MIGHT BE?"

The idea, then, was to bring in people with open-world expertise who could suggest the necessary tweaks to the tools that longer-serving staff knew inside out, which is a glib way of explaining one of the most complex challenges Guerrilla has ever faced. Just about everything would be affected: the studio's structure, its tools, and the way they were used. The lighting team had to adjust from the hand-lit levels of a *Killzone* to a day-night cycle. The engineers have had to adapt to streaming in assets around a player who can pick their own path, after a decade of loading in ►

me, it illustrated how different making something entirely new is, as opposed to taking something that exists and improving on it."

With production now in full swing, things are a little different, but Wolterbeek-Muller continues to feel the thrill of the new. "The most fun thing about the phase we're in now is that you look the other way for three days, you go back and start the game, and you find something completely surprising and new. So much is happening – it's incredible to see."







Q & A : HERMEN HULST

MANAGING DIRECTOR, GUERRILLA GAMES

You moved to a bigger studio around the time you started work on *Horizon*. Were the two connected?

It was an evolution more than a hard connection tied to the project. Our studio had grown beyond 100 people, which was the capacity at the old building, and it was on a UNESCO-protected waterfront. It was very important that we stay in that area, because I feel it defines who we are. We've always been in the heart of Amsterdam. I worked on getting [the new] building for four or five years. The investor was trying to make a hotel out of it; that didn't work out, and we seized the opportunity. It's pretty much the only modern building in the heart of Amsterdam.

***Horizon* came out of a studio-wide pitching and voting process. Why did you choose to do it that way?**

We have a very flat organisation, and we're open to anybody on the floor offering up ideas or dissent. When you have 200 people, you have so

much creative talent. It would be a big mistake to only have your formal creatives — your designers — come up with game ideas. Also, I'm a firm believer that you need to embark on projects that are widely supported by the team you're making them with.

What was your initial reaction to the pitch?

It was my personal favourite right away. I saw it, and I just felt immediately — and many others did too — that this was the one.

What's been the biggest challenge you've faced in making *Horizon*?

It's the sum total of all the newness, all the new stuff to the studio. A new IP, a new genre, it's open world... Being out of your comfort zone by a mile and a half.

Is it safe to say it's the toughest project you've ever worked on?

After we shipped *Killzone: Shadow Fall*, and we'd been through the hoopla of

doing a launch title, I thought that was going to be the toughest thing we'd ever do. It pales in comparison to this. This is so much more challenging on the team in every single way. But I find that doing something that is this refreshing, and that is supported so strongly by the development team, is probably even more important to the success of a title than how far you are out of your comfort zone. I feel a sense of love for this project among the team, and maybe that sounds corny, but it's really empowering.

Does this mean you're done with *Killzone* for good now?

My enthusiasm for *Horizon* by no means should suggest that I'm now uninterested in *Killzone*. We love that franchise, we really do. But it's too early for me to comment on future projects. It's going to be a very big challenge for us to get this title out the door. And as for what's going to happen after that? We'll talk about that later.





the next area of a level and unloading the previous one. A scripting system built to serve *Killzone*'s specific needs ("You could do anything you wanted with it," Van Beek says, "as long as you were making a firstperson shooter") was thrown out and rebuilt. And while release is still a long way off, Guerrilla is already trying to get its head around the concept of QA testing a game whose bugs are caused by the collision of dynamic systems across a sprawling world.

Not all Guerrilla's existing work was dragged into the Recycle Bin, however. Much of it has helped *Horizon* to stand apart from its clear influences — its *Tomb Raider* climbing, its *Monster Hunter* looting, its *Skryim* compass. There's an example of this in the demo, where Aloy sprints away from the Thunderjaw and jumps through a gap between some rocks, only for the beast to clatter right through them. "Making a game like *Killzone* means we have very complex destructibility pipelines, which if we'd just made RPGs before, wouldn't be something we'd have lying around," Van Beek tells us. "Having made other games in a completely different genre means we can bring elements of them into this game as well. You can sort of see that in the combat: it's not your typical action-RPG combat. There's an aspect of *Killzone*'s intensity in there."

Horizon: Zero Dawn may have been Van Beek's idea, but it could not have been made without the support of the studio as a whole. *Killzone: Shadow Fall* may have been Guerrilla's first PS4 game, but it is *Horizon* that represents the true generational shift for the developer, an idea selected by studio staff who knew full well how much they would need to change in order to make it work. Perhaps in another company, they would never have been given the choice, their next project presented to them as a fait accompli and a few dozen of them laid off so their employer could bring in new people with the right skills. Guerrilla, evidently, is not that type of studio.

"It's been a big leap for the company, going from this one thing we're known for and then going, 'OK, we're going to be a different studio that makes a different kind of game,'" Van Beek says. "It's quite rare, I think. If a studio makes racing games, they stick to racing games. If they make shooters, they stick to shooters. I don't think you



can make these things as a single auteur-designer — it's very much a team sport."

Yet you'd forgive Van Beek for feeling more pressure than his colleagues. It is his idea, after all. There have been changes along the way, but his original vision — of a female warrior battling machines after mankind's fall — has held true, despite the occasional protestations of his colleagues (Norris admits to having lobbied for Aloy's name to be changed). And, of course, despite many people struggling to visualise such a disparate collection of themes combining coherently. "In my head, it always worked," Van Beek says, "but at certain points during the project, I would say to myself, 'Hang on. Really? We're making *this*? Aren't

ABOVE LEFT Although we're told an airborne experiment in the prototype was left on the cutting-room floor, an open world needs a fast travel system, and this beast could well provide it. ABOVE A levelling system offers a steady increase in power and skill points to be spent in a tree that is completely open from the start. You'll also craft new outfits that offer you buffs

"AT CERTAIN POINTS, I WOULD SAY TO MYSELF, 'HANG ON. REALLY? WE'RE MAKING THIS?'"

they just going to laugh at us?' The most terrifying thing was the E3 announcement — worrying how everyone was going to see it. Maybe they'd just think it was silly."

Nope. One studio wall has been freshly plastered with the host of awards the game won at E3, and on the day of our visit, Guerrilla learns that *Horizon* has been named Best Original Game in the prestigious Game Critics Awards. Yet there is an awful lot still to do. For all the difficulty of the metamorphosis from shooter studio to RPG maker, open-world games live or die on something far trickier to pin down than tools or pipelines. They are a parlous balance of elegance and emergence, of dynamic systems bumping into each other with such chaotic grace that they feel as if they could have been scripted. Guerrilla will have to make such elements play nicely together with the same finesse it has applied to the seemingly contradictory aspects of its core concept. It has successfully broken free of the constraints of *Killzone*'s corridors, unbound itself from the conventions of the FPS, and rebuilt itself in order to meet the steepest challenge it has ever faced. Now comes the hard part. ■



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A portrait of Min-Liang Tan, a man with dark hair, wearing a black V-neck t-shirt and blue jeans. He is sitting on a teal-colored couch, leaning forward with his hands clasped. A white diamond-shaped graphic is overlaid on the lower half of the image, containing text.

AN AUDIENCE WITH...

MIN-LIANG TAN

Razer's co-founder discusses life
as the self-proclaimed Tony Stark
of the videogame peripheral

BY SIMON PARKIN

Photography Kevin Nixon

Singaporean ex-lawyer **Min-Liang Tan**'s seminal invention was a mouse designed to give him and his friends a competitive advantage in *Quake*. The mouse, later dubbed 'Boomslang', proved so popular that he co-founded a company just to manufacture it at scale. A decade later, Razer has a small but refined clutch of primarily eSports-related peripherals: mice, keyboards, headphones and laptops. They're aimed at the premium end of the market and tailored for professional players or wannabes. While Tan was perhaps born too early to make pro gaming his profession, the designer is able to live his childhood aspirations through the 260-odd pros that Razer sponsors. As we meet in the darkened belly of a London hotel, he presents an almost philanthropic eagerness to serve players with his products and Razer's support. Is this just spin?

How did videogames factor into your childhood in Singapore?

I grew up in a small city-state. There was a lot of focus on academic achievement. Videogames were not encouraged. Nonetheless, I was a hardcore gamer growing up. It's what I spent the majority of my time doing. Growing up, computer gaming was something seen as a waste of time. People told me that I was wasting my youth and that nothing good would come of it.

What was your first system?

The Apple II. I played *Lode Runner* and *Rescue Raiders*. That got me started. Then I had a 286 after that. One of the games I was most passionate about was *Wasteland*. I actually pirated *Wasteland* at the time. I felt bad about it for years afterwards. So when Brian Fargo Kickstarted *Wasteland 2*, I wrote to him to tell him what I'd done, and to pledge \$10,000 to the campaign. I also pushed the Kickstarter to the entire Razer community. We helped that project to become one of the largest [crowdfunding] campaigns ever. He then wrote me into the game as an NPC.

Did your parents buy the Apple II for you?

Actually, my father, who worked in real estate, bought it for himself. But I quickly realised that you could buy games for the system, and my brother and I took it over. Once we got a modem, many years later, I started to play online games such as *Unreal Tournament* and *Quake*. I was

truly passionate about it, to the extent that, as a teenager, I went on something of a pilgrimage. This was before the era of eSports. In the '90s, it was known as 'pro gaming', and the heart of the scene was in Korea. So I scrimped and saved for a ticket to get me out there. I don't speak a word of Korean. I had no idea what I was doing. I wanted to play games for a living. So I travelled to Korea by myself and made friends. Even at that time, everyone was obsessed with finding ways to have the competitive edge – that unfair advantage. That was really the genesis for our first product: a prototype mouse designed especially for pro gaming. There was this Eureka moment when I was playing *Quake* and they kicked me off a server because they thought I was using an aimbot.

This was in Korea?

No, later in San Francisco.

OK. Let's go back a bit. Where did you stay in Korea?

With one of my gaming buddies, who I'd met over the web. He was cool with me staying at his house and in the daytime I'd hang out in the PC bangs, the Internet cafés where many pros would congregate and compete. After a while, I decided to leave for America.

I wasn't necessarily planning to start a company out there. I was just looking for fun and a way to see the world. When I arrived, my friends and I became obsessed with finding ways to give ourselves a competitive advantage through modified hardware. We'd adjust the computer monitor to find the perfect angle. I suggested the idea of a mouse that was faster and

more precise. It wasn't a real business at this stage. It was just a desire to create tools for our friends to use to play.

It wasn't till about 2005 when I decided I wanted to turn what we were doing into a real business. That's when we formally incorporated the company. I led everything to do with creative design and product. Since then, we've been funded by some of the top venture capital firms in the world, but our focus has always remained the same: designing great hardware devices, and connecting them to great software platforms.

When you first left for Korea, what did your family think about what you were doing?

They thought it was a horrible idea. In fact, most of the time I kept what I was doing from them. I was juggling ►



Razer's popular Kraken headsets have a solid reputation for sound quality. The Forged Edition pictured is the premium model, and features custom drivers, milled aluminium cups and swappable cabling



CV

Min-Liang Tan grew up in Singapore, and graduated from the National University Of Singapore's Faculty Of Law. He practised law for two years as an advocate and solicitor for the Supreme Court Of Singapore, but says that he was "always a gamer first and a lawyer second". After a trip to Korea to witness the nascent professional gaming scene firsthand, Tan settled down in San Francisco, where he and a friend, Robert Krakoff, developed a mouse known as Boomslang and founded Razer. In March 2015, Tan was appointed as a board member of the Intellectual Property Office Of Singapore.

school with my game-playing habit. I actually graduated and practised law for a while. But gaming has always been my true passion.

When you were hanging out with semi-pro players, did you not also want to compete?

I was playing competitively. Even today, I play competitively when I can.

Then what made you decide to launch a startup rather than pursue a full-time career in pro gaming?

Back then, startups didn't have the sexy vibe that they do today. We didn't think of ourselves as entrepreneurs; it was just this natural progression. We were spending so much time designing products for our friends to use in competitions, and shipping them out, that it became obvious that we should formalise the arrangement... It wasn't a real business in 2005. Even today, to a certain degree, we don't look at it like a real business. We have numerous departments, 600 employees worldwide, ten offices and all the rest, but we're still pretty much the same. When people talk about management, I look at Razer like an RTS. You have resources that you mine, and then you make different things from those resources.

You were one of the first companies to sponsor pro players. How has the scene been changed by money? What's been gained, and what's been lost?

Back in the day, a tournament was little more than a group of people coming together, putting five dollars in a pot and allowing the winner to take all. It was a mixed blessing to win, since everyone expected you to buy the drinks. You'd lose more money than you gained! Today, some games have \$15 million prize pots. But the fundamentals are the same: people go to compete and to win. Unfortunately, there are some negative aspects: throwing games, cheating and so on. But this is a natural progression of any sport. It's a necessary evil.

What do you require from players when you take them on as your own?

Team Razer currently has more than 200 eSports athletes. We probably win more podium places than any other sponsor out there. Typically, our players are already

fans of Razer before we take them on, so we don't pay them to use our products. But that's one of our requirements. Usually they approach us and we evaluate them. We're mainly looking to see whether we will be able to find ways to make them better competitors. Characteristically, we look at whether we can help them improve their careers by providing, say, travel to foreign competitions. We provide rest areas for our players, offer training facilities and so on.

What do those training facilities look like?

At tournament venues, we provide a private area for our players. We provide a professional masseuse to give them a good massage. We have stations that are primed and ready. We [offer] psychological evaluations, and ways to help them overcome their jetlag, for example.

In commercial terms, is your involvement in eSports more about the marketing benefits or the financial benefits that you skim from players' winnings?

Many people have asked us why we still bother to sponsor eSports when we are already the most recognised brand in that sphere. To that I say: it's something we view as a responsibility, rather than [us being] in search of a marketing return on investment. Everyone in eSports knows who we are, but we want to give back to the community by sponsoring tournaments, athletes and so on. We also sponsor some shout-casters and streamers – so it's important for us to give back by supporting even the layers that aren't marketing-driven. We do

this because, as you've heard, eSports is in our DNA.

In terms of the hardware, what advantages can your products give people in practical terms?

We invented the gaming mouse. We created this industry. We [set] benchmarks, so today's products tend to be much faster and more precise.

How does that work practically?

Take the gaming mouse, for example. Our products use sensors that are more precise than the normal consumer mice out there. We tend to be an entire generation ahead of our competitors because we work on a silicon level together with the sensor providers. For example, our



"I LOOK AT RAZER LIKE AN RTS. YOU HAVE RESOURCES YOU MINE, AND THEN YOU MAKE DIFFERENT THINGS FROM THOSE RESOURCES"

sensors can be calibrated to a specific dot per inch value. This is a tiny increment, but when you're playing in a multimillion-dollar tournament, every single advantage is critical. Likewise, our keyboards are faster and crisper. This kind of stuff doesn't matter for the general user, but if you're a serious competitor, it matters a great deal.

What's your process for developing new products?

We do all of the design and research in-house. We have a dedicated team just looking at future tech — anything from three to five years away — based in Austin, Texas. Then we have three design centres in Singapore, Taiwan and San Francisco. We have more engineers than all of our competitors combined. All of this allows us to come up with prototypes that our sponsored players then test in live competitions. They give us feedback that allows us to optimise. This loop of development and improvement means that each product has a long period of evolution. One of the biggest criticisms of Razer is that we have very few products, but that's because of this iteration process. We think it's also what gives us an advantage.

How do you know when a product is ready if you're constantly iterating based on technological advances?

Sometimes we're still tweaking even the day before we ship. We can always make things better. The problem at Razer is that you're never going to be happy. We never pat ourselves on the back, because whenever we launch a product, there are always things that can be improved.

But surely there aren't an indefinite number of possible improvements with a mouse or a keyboard? At some point, it has to reach the point at which the benefits are imperceptible for a human being.

A good example would be the Naga mouse we created. It changed the face of MMOG gaming. We launched the mouse in 2008. Back then, everyone knew that you needed a great many buttons on a mouse for an MMOG,

but nobody could find a way to make it work, because people couldn't get used to it. We designed our MMOG mouse around the traditional mobile phone. I found that I could text without having to look at my phone's keyboard; I had muscle memory and knew where the buttons were. So we took the phone keyboard and placed it on the side of the mouse. It went on to become the most popular MMOG mouse on the planet. Back then, people would have said, "There's nothing you can do to improve a mouse for an MMOG," but we reinvented it. More recently, I've seen other companies copy that design. It's funny, because if I had to come up with that concept today, I'd come up with a different way of doing it. That style of mobile phone is no longer around thanks to the rise of smartphones. So from a design perspective, anthropologically and culturally, it was the right design at the right time. But in 2015, it makes no sense to design a product like that. So there are always improvements to make. The mouse and keyboard have been around for a long time. We're currently investing in camera-based gesture technology. It's always changing.

Your products are mostly aimed at top-level players, which represent an important market, but a relatively minor one. How have you managed to grow the company, given that you target a subset of players like this?

We could definitely grow the company in leaps and bounds if we were a real company. But we aren't.

Razer's focus is the committed end of the gaming market, but it has dabbled in mobile, too, with its Junglecat iPhone controller





"I GET TO BE
THE TONY
STARK OF
GAMING. IT'S
INCREDIBLY
FUN. I GET TO
DESIGN STUFF
FOR MYSELF
AS A GAMER"

Tan has been heralded as one of the most influential leaders in technology, his profile heightened particularly since Razer announced the OSVR platform

EDGE

What does that mean? You've already said that you have investors. Presumably they wouldn't be very happy to hear you say that.

Well, we are focused on the best products without being bound or shackled by traditional capitalist concerns like meeting certain revenue numbers. We've done it differently. We've been told that we could triple or quadruple our profits if we were willing to bring our price points down to a mass-market level. My answer has always been that if we did that, we'd compromise on the features in our products. Once we compromise, it would no longer be a Razer product. So we have five mice and two keyboards, two kinds of headphones and two laptops. We've incrementally increased our categories, rather than increasing the number of products within those categories. That's been our strategy for the company.

Do your sales improve when a Razer-sponsored team wins a major tournament?

It doesn't happen for us. We see eSports more as a way to validate our products. It's a huge honour for many people to be under the Razer umbrella. They get to use our lounges. There's allure. And we also bring that to the home user.

How do you see the coming wave of virtual reality headsets – Oculus CV1, HTC Vive, Morpheus, and so on – affecting your business?

We've actually been investing in VR for a really long time. We've taken all the work we've invested in the technology and have made it all open source. OSVR is probably the world's largest open source platform in VR today. We have more than 50 colleges and universities signed up. We have some of the larger game publishers supporting us. We think VR is potentially the next big platform. There's still some way to go, but already you're seeing music video producers designing for VR. We're only just at the cusp of where VR will take us.

There was a great deal of noise over OSVR when it was announced, but that excitement seems to have cooled off since. Is that because you're no longer focused on this area so much?

In the open source community, [OSVR] is massive. Not so much on the consumer side, perhaps, but we have more than 100 developers who have signed on. Berkeley

and Johns Hopkins university are developing in OSVR, as are Ubisoft, Valve and Gearbox. It's become the biggest open source platform. Our focus is really working with developers and academia.

But, as a product company, how does that fit into your business plans?

We don't look at ourselves like a product company. We are a company for gamers. We have more than two million players using our software platforms [daily]. At the end of the day, we don't do everything for business reasons. OSVR is something we look at [and] we think it's pretty cool. We think it's going to be a massive platform, and that's good enough for us.



What exactly do you say in your investor meetings when you're talking about almost giving philanthropically to the advancement of virtual reality? How do you justify it?

We've been lucky to find investors that have invested on the premise that we know what we're doing is to serve gamers. We were up front how we run the company. We're not focused on the bottom line. We've remained true to this. It's great testament to our investors that they've allowed us to continue in this way. Fingers crossed I'm not going to be fired any time soon. And we're growing quickly. Part of our success is down to our culture.

What do you personally get from this? Other than a vocation and livelihood, what gets you out of bed each day?

I get to be the Tony Stark of gaming. It's incredibly fun. I get to design stuff for myself as a gamer.

Do you see yourself as an inventor?

I see the team as innovators. We are the only company to have won Best Of CES in five consecutive years. It's tough to continually push the limits, but we have a platform in what's going to be the biggest growth entertainment sector in the world. There are two billion gamers out there. The idea of the gamer as a stereotypical basement-dwelling teenager has changed. We're seeing gamers who are bankers, lawyers, young parents and even small children. They are all gamers. And that's the group that we're focused on. ■



The 27 teams under the Team Razer brand racked up over 280 podium places and \$4 million in prize money in 2014, the biggest share of which came from Dota 2

While much of Razer's focus is on competitive peripherals, its offering is growing increasingly diverse. Its Turret 'lapboard' is designed with living-room PC gaming in mind, a foldout magnetised mouse pad stopping the wireless mouse from slipping away as you balance the setup on your lap

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YOUR GUIDE TO WHAT'S ON PS4.

AUGUST

AUG
28



- AUG 28 MADDEN NFL 16
- AUG 28 UNTIL DAWN
- AUG 28 DISNEY INFINITY 3.0

**THIS IS FOR
THE PLAYERS**

#4ThePlayers

SEPTEMBER

SEP
11



- SEP 1 METAL GEAR SOLID V: THE PHANTOM PAIN
- SEP 4 MAD MAX
- SEP 11 TEARAWAY UNFOLDED
- SEP 15 DESTINY: THE TAKEN KING
- SEP 25 FIFA 16
- SEP 29 NBA 2K16
- SEP 29 LEGO DIMENSIONS

OCTOBER

OCT
23



- OCT 6 ROCK BAND 4
- OCT 9 UNCHARTED: THE NATHAN DRAKE COLLECTION
- OCT 13 TOM CLANCY'S RAINBOW SIX SIEGE
- OCT 23 GUITAR HERO LIVE
- OCT 23 ASSASSIN'S CREED SYNDICATE
- OCT 30 WWE 2K16

NOVEMBER

NOV
20



- NOV 5 NEED FOR SPEED
- NOV 6 CALL OF DUTY: BLACK OPS III
- NOV 10 FALLOUT 4
- NOV 20 STAR WARS™ BATTLEFRONT

COMING SOON

- 2015 DEC 1 JUST CAUSE 3
- 2015 DEC 8 HITMAN
- 2016 FEB 29 MIRROR'S EDGE: CATALYST
- 2016 MAR 8 TOM CLANCY'S THE DIVISION
- 2016 TBA UNCHARTED 4: A THIEF'S END
- 2016 TBA THE LAST GUARDIAN

- 2016 TBA RATCHET & CLANK
- 2016 TBA DOOM
- 2016 TBA HORIZON: ZERO DAWN
- 2016 TBA MASS EFFECT ANDROMEDA
- 2016 TBA STREET FIGHTER V
- 2016 TBA DREAMS

- 2016 TBA DEAD ISLAND 2
- 2016 TBA FINAL FANTASY VII REMAKE
- 2016 TBA PERSONA 5
- 2016 TBA NO MAN'S SKY

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A Thief's End
MULTIPLAYER BETA
WHILE AVAILABLE

DRAKE'S FORTUNE • AMONG THIEVES • DRAKE'S DECEPTION

UNCHARTED

THE NATHAN DRAKE
COLLECTION

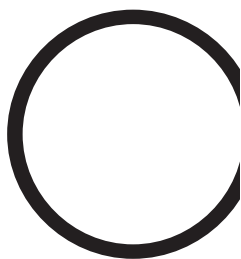


critical mass

With consumers able to exert more pressure on developers than ever, how is the game industry responding? And is the customer always right?

By **SIMON PARKIN**





On March 12, 2012, a disgruntled fan of the *Mass Effect* series posted a message on the official BioWare forum outlining the reasons why he was frustrated with the Shepard trilogy's ending. The post is addressed to *Mass Effect 3*'s developers and writers and outlines, under a series of bolded headings, a litany of their supposed failings. Some of the author's frustrations sprang from the shortfall between the promise of making meaningful choices across three games and the reality of how players' actions affected the three endings provided. Other grievances were based on perceived inconsistencies in the science fiction. In conclusion, he wrote, "BioWare... this game deserves a better ending. We know you can do better than this. Please, do not let us down in this way."

Later that week, another member of the same forum posted a message saying that he had taken his complaint to a higher power than even the developer: the US Federal Trade Commission. He called on any other unhappy fans who believed that BioWare had somehow failed to deliver a satisfactory experience to do the same. Another user posted a forum poll in which you could vote on whether or not the developer should patch the ending in order to replace it with a new, "brighter" one. Implausibly, almost 100,000 people voted in the poll, an overwhelming 91 per cent in favour of the notion that BioWare should rewrite and re-release the ending. Yet another player launched a charity drive, asking players to donate money to Child's

Play as a way to demonstrate the depth of their discontent and put a curious kind of emotional pressure on the company ('Fix the ending or else the children get... support?'). The fundraiser collected more than \$80,000 before being shut down by Child's Play.

All this rabble-rousing worked. Seven days after that first forum post, **Dr Ray Muzyka**, co-founder of BioWare and its then-CEO, released a strange statement in which he simultaneously defended the work of *Mass Effect 3*'s writing and design team, while pledging to "accept the criticism and feedback with humility". Muzyka also revealed that, as a result of the pressure, his staff were now working on supplementary material that would "provide more clarity" to players "seeking closure" to their *Mass Effect* journey. In his post, Muzyka articulated a conundrum that creators of popular fiction have wrestled with through the centuries: how to square the artistic vision of a creator with the demands of the audience who pay for the work. "We're working hard to maintain the right balance between the artistic integrity of the original story while addressing the fan feedback we've received," he wrote.

This tussle between an artist and their audience has historical precedent. For instance, Charles Dickens' *The Old Curiosity Shop* was published in instalments in the author's own weekly periodical, *Master Humphrey's Clock*. Within three days of publishing Chapter 53, in which a lovable



BioWare co-founder
Dr Ray Muzyka



character, Little Nell, visits an old church and has a conversation in a graveyard, Dickens had received several letters warning the writer to refrain from what many believed he was planning: murder. These readers took Nell's visit to the graveyard in conjunction with the line that she looked "pale but very happy" as a foreshadowing of her death.

There's an anecdotal, possibly apocryphal, story that in subsequent weeks American readers stormed New York City's piers, demanding to know from visitors from England whether or not Nell dies. And Dickens was later swarmed with letters expressing anger and heartbreak over her eventual fate. Similarly, after finding out that the character Aeris dies midway through 1997's *Final Fantasy VII*, fans sent letters and emails to the game's developer, Square, either berating the team's decision or demanding to know how it might be undone.

While neither Dickens nor Square acted upon their audience's complaints, the gap between videogame creator and videogame consumer has closed considerably since *FFVII*'s release, making it far harder for studios to ignore such impassioned pleas. No more does the game-maker who kills off a beloved set of characters, or who adds a controversial design, receive a mere sack full of letters. They are now inundated with petitions, forum posts and even guilt-inducing charity drives. In the most extreme cases, some developers have received personal threats and online harassment. In 2013, for instance, David Vonderhaar, design director of *Call Of Duty: Black Ops II* was told he should "die in a fire" or "kill himself" by upset players after he announced via Twitter that the firing rate of one of the game's most popular weapons had been tweaked from 0.2 seconds to 0.4 seconds. The volume of harassment became so great that Activision community manager **Dan Amrich** wrote a blog post in which he called the attackers "immature, whiny assholes".

"The way in which game developers interact with players has been the most significant change in the industry in recent years," says **Zac Antonaci**, who is head of community management at Frontier Developments and acts as a go-between, managing the demands of *Elite: Dangerous*'s

playerbase and the development team. "Today, every element of game production has to consider and be mindful of the players. With all games moving more online and the development of the industry in so many ways becoming a more social experience, the value of a strong relationship between game maker and players is more important than ever."

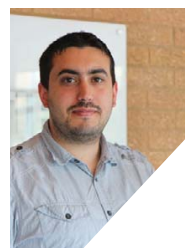
Things have grown yet more fraught in the crowdfunding era and with the rise of the amateur consumer-publisher. Many backers of nascent videogames such as Frontier's *Elite: Dangerous* (which was funded via Kickstarter) hold the belief that their patronage should bestow special privileges — as stakeholders, they think that they should be given a say in a game's direction, even at the granular level of game and character design. "[Crowdfunding] does change the expectations of both the game studio and the players," says Antonaci. "Developers understand that by running a crowdfunding campaign, they are inviting players even closer to the process, which, as a community manager, is fantastically exciting."

Perhaps, but as another community manager (who asked to remain anonymous) puts it, the relationship is also complicated and challenging. "Some community members who fund a game become entitled and think that they know better than the designers," he says. "If they feel like their demands are being ignored, things can become ugly."


Garth DeAngelis, lead producer on *XCOM 2*, agrees: "Listening to the community has become absolutely critical for game designers in recent years. But there is a fine line. The team making the game understand the ramifications of certain features and the knock-on effects in a way that players looking in from the outside simply cannot. We can't act upon every single thing that the community asks for. Design by committee never works."

Communicating this sensitively to irate players is a challenge. "The most passionate fans are often the most vocal," says DeAngelis. "These characters are usually screaming for features that we have already examined very

"Some community members who fund a game become entitled and think that they know better than the designers"



Frontier Developments
community manager
Zac Antonaci



carefully internally. There are logical reasons why we have chosen to not go down certain paths. That can be tricky to communicate to the community.”

However, when the feedback coming from players is unanimous, it can offer one of the most useful gauges for a developer to use in prioritising a sequel’s design or features. “While working on *XCOM: Enemy Unknown*, we had in the back of our minds that it would be cool to have procedural levels,” DeAngelis explains. “After the game launched, we aggregated all of the reviews, the forum posts and the YouTube commentaries. Then we took them apart and created piles of feedback so we could see which criticisms were most widely maintained. We found that players wanted more variety in levels. That allowed us to prioritise the procedural feature for the sequel based on hard data. For us, that’s how it tends to work. Player feedback allows us to prioritise features on which we were already working.”

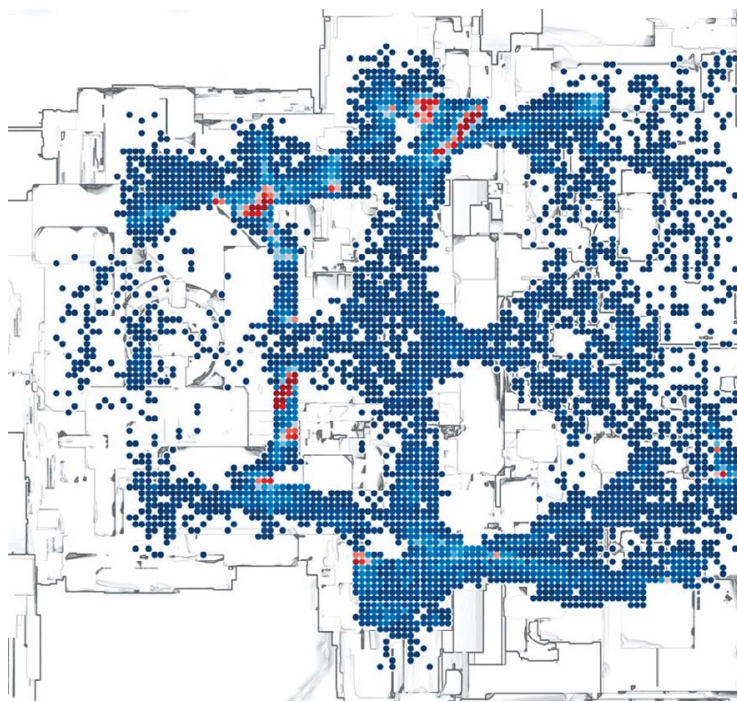


Garth DeAngelis, lead producer on *XCOM 2*

Other studios have taken this process of gathering and implementing feedback to an industrial-scale level. **John Hopson** heads up the user research team at Bungie in Bellevue, Washington. He leads a team of researchers who provide *Destiny*’s designers with player feedback, delivering data that can be used to inform design decisions. The studio invited players into the studio to begin this process long before the game was finished, using a range of techniques, from simple fundamentals to the highly advanced.

“We observed participants directly and made notes,” Hopson explains. “Then we had the participants fill out surveys to let us know what they thought. We also recorded every play session and connected it to our logging data so we could go back and watch key moments. Those video clips became one of our most effective communications tools with the rest of the studio, because when you can watch a dozen or so videos of players experiencing the same problem, that’s much more persuasive than any report.”

Hopson’s team designed a tool that would allow players to offer instant feedback while




they were playing. “Participants could press combinations of buttons on their controller to tell us that the game at that moment was ‘awesome’ or ‘frustrating’ and so on.” These instant feedback reports were then connected to the video recordings, so a designer could sit down after a test and watch the exact moments where players said they were having a problem, or even the moments where players said they were having the most fun.

As well as active feedback offered by players, Hopson and his team collected and examined passive feedback. *Destiny* was the first Bungie game for which the team made extensive use of eye-tracking data, which showed how effectively players were able to navigate the game’s complicated user interface. “Knowing where players were looking and what they were reading was really useful in telling when players were having trouble understanding something, and when they were simply not noticing it,” he says.

Hopson and his team’s work had only just begun when *Destiny* launched, however, and he estimates that today they spend around a third of their time monitoring feedback from the public, and two-thirds testing future addons. “We start every morning by looking at data reports of how people are playing

This *Destiny* heat map shows player activity (and, in red, common sniping spots) on The Burning Shrine map during Trials Of Osiris, a weekly, high-level, 3v3 multiplayer contest



“In the world of packaged console games, having a ton of data never meant that much, because you could only make limited changes”



Seth Killian, former special combat advisor at Capcom

the game right now and monitoring forum discussions to keep abreast of player attitudes. We use this data to tell which changes will have the most impact and which fixes are the most urgent. For example, back when the Vex Mythoclast was first used in PVP, Internet forums were filled with players claiming that it was a super-weapon that made the Crucible unplayable. But from looking at the data, we could see that the actual impact of the weapon was a lot smaller than the emotional reaction.”

In the incident of the Vex Mythoclast, the customer, it turned out, was objectively wrong. But, according to Hopson, that doesn’t necessarily matter. “The emotional reaction was still true,” he says. “But knowing that [the outcry] was based on emotion rather than fact meant we could take the time to make the right fix instead of rushing something out the door and possibly breaking the game in some other fashion.”


The structured influence of player data and feedback on game design is a relatively recent development. “While analysing player data has been around for quite a while in games, it really took off with the success of the free-to-play genre,” says **Seth Killian**, former special combat advisor at Capcom, who worked on games such as *Street Fighter IV* and *Ultimate Marvel Vs Capcom 3*. “In the world of packaged console games on a shelf, having a ton of data never meant that much, because you could only make limited changes to your game after it had shipped. Updates required a lot of time for approvals, testing by the platform holder, and often involved a significant fee. The developer also had less incentive to offer updates as the players you were studying had already spent the money to purchase your game, so there was limited or no opportunity to make additional money. With competitive free-to-play games, you expect to be making a lot of updates, so you have a chance to actually use the data you collect to address players’ problems and improve in-game sales.”

This may be true, but there was one far earlier era when

player feedback exerted a significant influence on game design: the arcade heyday. Back in the industry’s earliest days, Atari would monitor how much money new games made at test locations. If these cabinets failed to pass a certain financial threshold, the game would be quietly canned. This rather simplistic implementation of player feedback become more sophisticated with the earlier *Street Fighters*. Capcom’s designers would launch a new entry in the series, and then carefully monitor top-level players in order to see if certain characters were overpowered. They could then fine tune the roster balance in the subsequent iteration.

“For us, using player feedback to tweak and improve competitive videogames isn’t a new phenomenon,” says **Peter ‘Combofiend’ Rosas**, associate producer on the forthcoming *Street Fighter V*. In more recent years, however, the process has been improved thanks to data gathered from the game’s servers as well as the various communication channels that players around the world use to communicate with the company. “Our methodology and data targets have shifted recently,” Rosas says. “Nowadays, with YouTube, Twitter, Capcom-Unity, and Facebook, there are many ways that players can reach out to us to share feedback. A lot of those players aren’t professionals, so it





provides us with a variety of data, from those just getting started all the way to our hardcore."

Balancing a game like *Street Fighter*, which is played in high-stakes cash-prize tournaments and which features a large character roster, is a tremendous challenge, but it's undoubtedly one of the most important elements of the series' design. If the community comes to collectively consider a competitive fighting game as being imbalanced, it can ruin its reputation irredeemably. "We've found [from looking at the data] that there are certain types of losses to players that are more acceptable than others," says Rosas. "By this, I mean that if a player loses to something their character does not have the tools to stop, or in an imbalanced match-up, the disparity will dissuade them from playing the game further or from taking the loss; the blame is shifted from them to what they might perceive as a poorly designed game. If they feel as though the loss was justified, the odds of them sticking around to play again greatly increase: it becomes a personal challenge that they want to overcome."

CCP, developer of *EVE Online*, has gone further than most in creating systems whereby its audience can feel heard in steering the game's direction. In 2008, the developer commissioned a study into the political state of the MMOG's game world. The study's authors argued the need for a player-run political body, concluding: "*EVE*'s society must be granted a larger role in exerting influence on the legislative powers of CCP." In response, CCP established the Council Of Stellar Management, currently the only example of a game-based democratic organisation designed to represent a playerbase. The council has 14 places, and each year scores of candidates stand for election, campaigning in the game on particular issues, making promises to other players to effect certain changes.

Every six months, CCP flies the successful candidates to its headquarters in Reykjavik for three days. During that time, the council meets with the studio's staff and hears about the new features planned for the game's

future. Much like on Internet forums or in Kickstarter campaign comment sections, the debates can become heated; often council members disagree with one another. But the council performs a crucial role: it bridges the gap between the game's players and creators.

Some players believe the council is little more than a token gesture, but in 2011 they were offered some strong evidence to the contrary. At the time, CCP introduced a new feature, one that had been 18 months in the making: a digital store for in-game items that could be purchased for real money, including — brazenly — a monocle with a \$70 price tag. The feature was announced in a grand reveal by CCP, but it was the last thing that the majority of players were interested in, especially when the game was, at the time, suffering from numerous technical issues. Players complained and these complaints turned to anger when an internal memo from CCP's CEO, Hilmar Pétursson, leaked. In it, he dismissed the players' reaction to the new store as mere noise.

That week, thousands of players gathered in the game and began staging symbolic riots. Many fired their ships' weapons on a giant monument stationed outside a major trading hub. The protest marked the beginning of what later became known as the 'summer of rage'. CCP immediately called an emergency summit in Iceland for the council. It proved effective. Acting on the council's advice, Pétursson wrote an open letter to the game's players admitting that he had made a mistake. Furthermore, the developer acknowledged the events in game: it erected a battered memorial at the place where the majority of the protests had taken place.

For Frontier's Antonaci, regardless of whether or not a developer chooses to act upon the feedback given by a game's players, it's crucial to demonstrate that grievances have been heard. "I think it's about intelligent listening," he says. "Any idea that is proffered in a considerate way is a good idea, since it means someone actually loves your product and wants to be involved. Ideas need to be filtered, but regardless of how you do this, or whether or not you implement the idea, the key is to always be sure to let the community know how the process is working. Always, always close that loop." ■



Peter Rosas, associate producer on *SFV*



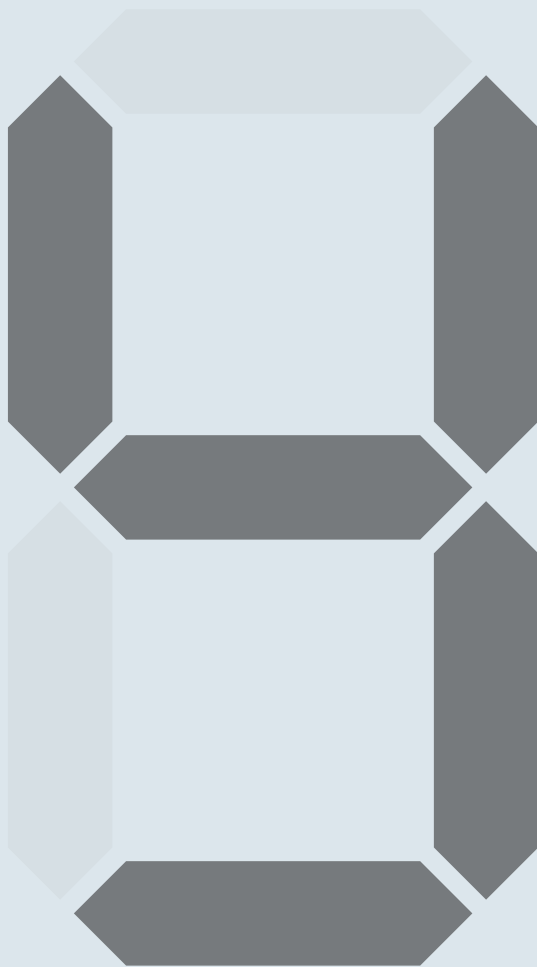
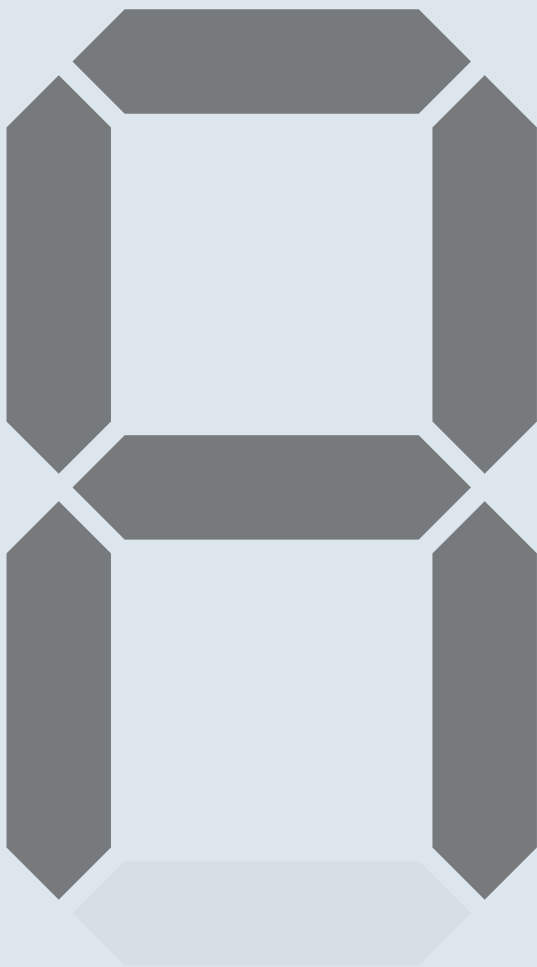


Date

Time

What happens when we lose track of ourselves and put too much into playing videogames? Chronoslip – and potentially fatal consequences

By SIMON PARKIN





hen Rong-Yu died in two places at once.

At 10pm on Tuesday, January 31, 2012, the 23-year-old took a seat in the farthest corner of an Internet café on the outskirts of New Taipei City, Taiwan. He lit a cigarette and logged into an online videogame. He played almost continuously for 23 hours, stopping occasionally only to rest his head on the table in front of his monitor and sleep for a little while.

Each time that he woke he picked up his game where he'd left off. Then, one time, he did not raise his head. It was nine hours before a member of the café's staff tried to rouse the motionless man, in order to tell him that his time was up, only to find his body stiff and cold.

Chen Rong-Yu died in two places at once. Not in the sense that during those final moments his mind drifted to another place (the landscape of some comforting memory where he might be soothed or cheered, for example). Rather, when Rong-Yu's heart failed, he simultaneously departed two realities.

He died there in the Taiwanese café, with its peeling paint and cloying heat. And he died in Summoner's Rift, a forest blanketed by perpetual gloom. Summoner's Rift has the appearance of a remote, unvisited place, but each day it is frequented by hundreds of thousands of people, players of the online videogame *League Of Legends*, arguably the most popular online videogame in the world. Summoner's Rift is the pitch on which they do battle.

Rong-Yu had died here many times before. He had been speared, incinerated, or otherwise obliterated by rivals as he scrambled through its thickets and across its river in an endlessly repeating game of territorial warfare.

Many games are metaphors for warfare. The team sports — football, hockey, rugby and so on — are rambling battles in which attackers and defenders, led by their captains, ebb and flow up and down the field in a clash of will and power. American football is a series of frantic First World War-style scrambles for territory measured in ten-yard increments. Tennis is a pistol duel: squinting shots lined up in the glare of a high-noon sun. Running races are breakneck chases between predator and prey. Boxing doesn't even bother with the metaphor: it's a plain old fistfight ending in blood and bruise.

So it is with *League Of Legends*, a game in which two teams attempt to overwhelm one another. In warfare, real or symbolic, there are inevitable casualties. To date, Rong-Yu's deaths in the virtual forest had been symbolic and temporary, like the toppling of a pawn from a chessboard, a griefless death, easily undone. That night, however, his virtual death was mirrored in reality. It was true and final.

When the paramedics lifted Rong-Yu from his chair, his rictus hands remained in place, as if clawed atop an invisible mouse and keyboard. Like the pulp detective thriller in which the lifeless hand points towards some crucial clue, Rong-Yu's final pose appeared to incriminate his killer.

Yu's story is unusual, but not unique. On July 13, 2012,

another young man, 19-year-old Chuang Cheng Feng, was found dead in his chair at a different Taiwanese Internet café. Feng, a five-foot-five taekwondo champion, had settled down to play the online game *Diablo III* after a friend he was supposed to meet failed to show up. He played the game to pass the time: ten hours of uninterrupted questing. Then, mind hazed by the room's thick cigarette smoke and eyes stinging from the monitor's flicks and throbs, he decided to step outside for some fresh air.

Feng stood, took three steps then stumbled and collapsed, his mouth foaming. He too was pronounced dead at the scene.

There are others. In February 2011 a 30-year-old Chinese man died at an Internet café on the outskirts of Beijing after playing an online game for three days straight. On September 2, 2012, a 48-year-old man named Liu died in Kaohsiung City following a seven-hour stint at the controller. His was the third game-related death of the year recorded in Taiwan.

In 2015, the deaths came sooner. On January 1, a 38-year-old man was found dead at an Internet café in Taipei, apparently after playing videogames for five days straight. A week later another: a 32-year-old man, known as Hsieh, entered a café in Kaohsiung on January 6. Two days later employees found him slumped on the desk at which he'd been playing an online game. He was pronounced dead on arrival at the hospital.

In May 2015 a man in Hefei, the largest city in the Anhui province of China, reportedly collapsed after playing a game for 14 days straight. When the paramedics arrived, one newspaper reported him as saying, "Leave me alone. Just put me back in my chair. I want to keep playing."

The deaths aren't limited to Southeast Asia, and they aren't only contemporary.

In April 1982 an 18-year-old American man, Peter Burkowski, walked into Friar Tuck's Game Room, a popular videogame arcade in Calumet City, Illinois. According to the arcade's owner, Tom Blankly, Burkowski and a friend arrived at 8:30pm and began playing *Berzerk*. Burkowski was a top student who hoped to become a doctor. He also had a talent for arcade games. Within 15 minutes, he'd posted his initials next to two high scores on *Berzerk*'s leaderboard. Then he took four steps towards an adjacent machine, dropped a quarter into its slot, and collapsed dead from a heart attack.

The next day, one newspaper headline read, 'Video Game Death'; the earliest report of its kind. Similar incidents have continued through the years.

In July 2011 a young British player named Chris Staniforth died from a blood clot following a prolonged session at his Xbox 360.

"When Chris got into a game, he could play it for hours on end," Staniforth's father told reporters at the time. "He got sucked in playing *Halo* online against people from all over the world. I'm not for one minute blaming the manufacturer of Xbox. It isn't their fault that people use them for so long."

Staniforth's father absolved Microsoft, Xbox's

manufacturer and *Halo*'s publisher, of blame for his son's death. We are, he implied, each responsible for the way in which we spend our time. And yet, when Microsoft's rival Nintendo launched its Wii console, it included a warning that would interrupt many of its games. It read: "Why not take a break?" and was accompanied by an illustration of an open window, wind blowing the curtains inwards, calling the player outside.

Nintendo knows that videogames have a certain power that encourages people to inhabit an alternative reality, where time's passing goes unnoticed. The company's solution is to break the fourth wall for a moment in order to offer a way out for the spellbound player.

The 'death by videogames' story occupies a peculiar place in the modern news cycle. We don't read of 'death by cinema', 'death by literature' or 'death by crossword', even though humans must surely have died while engaged in any one of these mostly inactive pursuits. But with videogames, news of a fresh tragedy arrives, usually from Asia, with grim regularity. The circumstances are always similar: a young man found dead at his keyboard, seemingly killed by an unhealthy relationship with this sedentary hobby.

surrounded by people, is a news story that carries with it some of the mundane horror of contemporary life: the knowledge that, though we are packed together in cities, and through the Internet, our mobile phones and online videogames, and are ostensibly more connected than ever before, it's also possible to die in plain sight and for that death to go unnoticed.

This, however, was not the intended subtext of the Daily Mail's story. Rather, its headline implies that, not only are videogames a waste of time, not only do they encourage inactivity and obesity, not only are they used by companies to market and sell products to children, not only can they distract from work and study, they also present a mortal danger. You might die while playing them.

You could also die while sprawled out on the sofa, chain-watching the latest television serial. You might also perish after a 400-page Tolstoy binge, or while you endure Abel Gance's nine-hour-long film *Napoleon*, or when caught up in an especially engaging cross-stitch pattern. People have been known to die during a 12-hour, blood-clotting long-haul flight. Any activity that compels a human being to sit for hours on end without moving is,



This is an edited extract from *Death By Video Game* by Simon Parkin, due from Serpent's Tail on August 20

We don't read of 'death by cinema', 'death by literature' or 'death by crossword', even though humans must have died while engaged in any one of these mostly inactive pursuits



or videogame players, the news reports act as a cautionary tale, the kind of story mothers might tell their children to warn them off playing a handheld game beneath the sheets after lights out: "Look what might happen to you if you play a videogame for too long." For the newspapers, often staffed and read by a generation of people who grew up at a time when videogames weren't a fixture on the cultural landscape,

these tales fortify a generational distrust of the newest (and therefore most treacherous) entertainment medium.

"Gamer lies dead in Internet café for 9 HOURS before anyone notices," wrote the Daily Mail's headline writers of Rong-Yu's death, with evident disapproval of the obliviousness of those who become absorbed in videogames. Of course, Rong-Yu's death represents a broader issue of contemporary loneliness. To be left undiscovered for more than nine hours is the kind of tragic conclusion to life that usually befalls the elderly; where the isolation of old age – the departed partner, the distant children, the dull company of daytime TV – is made explicit in death. Young people are supposed to live in vibrant company. They are supposed to be noticed when they go missing. To sit dead in a chair, in public,

arguably, a mortal threat. In the 1982 Burkowski case, Mark Allen, Lake County's deputy coroner, said, sensibly, "Peter could have died in a number of stressful situations. We once had a boy who had a heart attack while studying for an exam. It just happened that he died in front of a videogame, but it's also quite interesting."

Nevertheless, videogames appear to have a better hit-rate than film, literature, exams or any of the others.

Videogames, it seems, are something else.

During my first year of university, my friends and I became partially nocturnal. We'd stay up late for the 9am lectures. We'd get up early for the 9pm parties. The rest of our waking hours were, as with so many students, given over to lounging in reeking halls, eating cheap pizza and playing videogames. My friend Alastair provided our gateway getaway: *Goldeneye 007*, the videogame adaptation of the 1995 James Bond film. Each night (which was, for our skewed body clocks, closer to day) we'd assemble in the front room of his shared apartment, pick teams and then sprint through ancient cave systems, creep through Russian military bunkers and teeter along cranes as we shot each other in a kind of armed-combat wide game. Most nights, at around two in the morning, someone would point out that it might be time to think about ordering some food in. We'd mournfully set down the controllers and head out to the local pizza takeaway.

"Er, guys, it looks like it might be shut," said Ian, as ►

we rounded the corner on one such night.

"Lucky Pizza is never shut", said Clare.

"What time is it anyway?" I asked.

"Oh," said Alastair. "It's half past four in the morning. How did we not notice that?"

A few years later, I left my wife playing the videogame *Animal Crossing* in our apartment one afternoon.

In *Animal Crossing* you assume the role of an immigrant who moves into a rural village to build a new life. When you disembark from the train you're greeted by an officious raccoon, the local shop owner and landlord, Tom Nook, who offers you a small house to call your own. Once you're settled in you get to know the neighbours, pen virtual letters, attend local festivals, fish, net bugs, excavate fossils, buy clothes and, of course, service your virtual mortgage. The game follows the console's internal clock and calendar: when it's night in your world, it's night in *Animal Crossing*. The shops open at nine and close at six, and Christmas falls on December 25.

Despite the fact that talking animals populate the game and despite the fact that your work is primarily to collect fossils and catch bugs for the local museum, *Animal Crossing* mimics life's rhythms, domestic pressures and timetable.

When I returned home later that evening, the flat was dark except for the quivering light of the TV screen. My partner sat on the floor, exactly as I'd left her hours earlier.

"Is everything OK?" I asked.

She turned her head stiffly; eyes hooded, as if awakening from a coma.

"Woah," she said. "I am cold and hungry."

A friend of mine has coined a term for the unique way in which videogames cause their players to become oblivious to time in this way: 'chronoslip'. It's not a new phenomenon. We speak of becoming 'lost in a good book', of 'losing track of time', of 'pastimes' (or, originally and more explicitly, 'passe-times'). The phenomenon is ancient. Tempus fugit, it turns out, especially while you're having fun.

But with videogames, these phrases don't quite suffice. What book or movie could keep the average viewer's attention for six uninterrupted hours? The titans of modern mainstream entertainment such as Harry Potter, Star Wars et al may boast expansive cumulative running or reading times, but they are broken into discrete, palatable chunks. With movies and TV series, we seem to reach our consumption limits sooner than with videogames, into which we can descend for ceaseless hours.

Perhaps the difference is that games are active rather than passive media. They do not temporarily suppress our free will. Rather, they demand it. We step into a game world and emerge, hours later, with little sense of where the time has gone. Sometimes the immersion is so complete that our bodies' physical signals do not penetrate the unreality: we forget to eat, to shift position in our chair. We neglect to keep warm, to pee. Time becomes yoked, not to the ticking of the clock, but to the pattern of our interactions, the pleasing rhythms of cause and effect. In strategy games time is divided into the number of

seconds it takes to build a barracks, train a soldier, or to mine the earth for resources. Seconds and minutes have no relevance here; time is calculated in units of action. By contrast, in a puzzle game time works like an egg timer: crack a level before your patience runs out and the timer is flipped; your store of patience is renewed.



ames achieve chronoslip because they replace the real world with a new one that moves to its own laws of physics and time.

This reality engages us totally, and we synchronise with its tempo.

Videogames, from the simplest card game through to the most vividly rendered fantasy world, consume our attention. When we become lost in a book we enter a state where the fabricated world and its

characters seem so real and pressing that we lose all sense of time. Small wonder it's so easy to lose oneself in a good game, where we become not only an eavesdropper or onlooker on a world, but an active participant in its action and drama. Videogames go further than other fiction: they revolve around us and react to our every choice and input. Just as a piano needs a pianist or a violin needs a violinist, videogames are lifeless without us. They need a player in a way that a film does not need a viewer to function.

No, videogames are not mere time-wasters. This label, so often and gleefully applied, implies a certain idleness on their part. Rather, they are time-killers: they destroy time. And they are accomplished killers, often leaving little trace of their handiwork; we remain oblivious to time's passing.

Videogames did not grow into the role of time-killer. They emerged, fully formed, fully capable. In his 1982 treatise on the emergent videogame, *Invasion Of The Space Invaders*, Martin Amis explained his first encounter with the titular Japanese arcade game, a summer romance that blossomed in a bar in the south of France during the summer of 1979:

"Now I had played quite a few bar machines in my time. I had driven toy cars, toy airplanes, toy submarines; I had shot toy cowboys, toy tanks, toy sharks. But I knew instantly that this was something different, something special. Cinematic melodrama blazing on the screen, infinite firing capacity, the beautiful responsiveness of the defending turret, the sting and pow of the missiles, the background pulse of the quickening heartbeat... The bar closed at 11 o'clock that night. I was the last to leave, tired but content."

Amis then describes the videogame player's descent into obsession.

"Your work starts to suffer. So does your health. So does your pocket. The lies increase in frequency and daring. Anyone who has ever tangled with a drink or drug problem will know how the interior monologue goes. 'I think I've got this under control at last. It's perfectly OK so long as you do it in moderation...'

"The addict then indulges in a wild three-hour session.

'I'm not going to touch that stuff again,' he vows. Twenty minutes later he is hunched once more over the screen, giving it all his back and shoulder, wincing, gloating, his eyes lit by a galaxy of strife.

"You think I exaggerate? I do, but only slightly. After all, the obsession/addiction factor is central to the game's success: you might even say that video-dependence is programmed into the computer."

The 'obsession factor' of which Amis speaks is something that is common to many types of game, not just those that are projected on a screen. The following excerpt is taken from an article entitled 'Chess-playing excitement,' published in the July 2, 1859 issue of Scientific American.

"Those who are engaged in mental pursuits should avoid a chessboard as they would an adder's nest, because chess misdirects and exhausts their intellectual energies... It is a game which no man who depends on his trade, business or profession can afford to waste time in practicing; it is an amusement — and a very unprofitable one — which the independently wealthy alone can afford time to lose in its pursuit. As there can be no great proficiency in this intricate game without long-continued practice, which demands a great deal of time, no young man who designs to be useful in the world can prosecute it without danger to

cafés that will decree when and for how long teenagers will be allowed to play on the premises. Similar legislation is already in place in South Korea where, in 2011, after a spate of similar deaths, the government introduced the Youth Protection Revision bill (sometimes known as the 'Cinderella law'), which prohibits teenagers from playing online games in Internet cafés after midnight.

Films are awarded age ratings that dictate the age limits of those who are allowed to view them. But videogames will perhaps be the first entertainment medium in history to inspire legislation with regard to how long a person is able to interact with them before taking a break.



mis was right: games are somehow different. We consume a book, but a game consumes us. It leaves us reeling and bewildered, hungry and ghosted in the fug of chronoslip.

The Big Net café, where Chuang Cheng Feng died, is a small business in a quiet town on the rural outskirts of Tainan. It's one of the only Internet cafés in the area. Months after the incident, the owner is unwilling to

Videogames will perhaps be the first entertainment medium in history to inspire legislation with regard to how long a person is able to interact with them before taking a break

his best interests."

Like Amis, the author describes one particular player's addict-like resolution to swear off the game.

"A young gentleman of our acquaintance, who had become a somewhat skillful player, recently pushed the chessboard from him at the end of the game, declaring, 'I have wasted too much time upon it already; I cannot afford to do this any longer; this is my last game.' We recommend his resolution to all those who have been foolishly led away by the present chess-excitement, as skill in this game is neither a useful nor graceful accomplishment."

In Taiwan, there have been enough café deaths that the government is no longer content with issuing mere recommendations for players to, as Scientific American put it, "make this their last game". Government officials have developed measures to help curtail the amount of time that people play games: a more forceful kind of intervention than Nintendo's gentle reminder of the great outdoors.

According to the section chief for the Economic Development Bureau of the Tainan City Government, the police routinely carry out spot checks after 10pm on cafés to see whether there are any under-18s on the premises. During the summer holidays the local government now runs a Youth Project, which warns young people about the dangers of playing games for too long. The government is even in the process of drafting new regulations for Internet

talk about what happened. The death on the premises has frightened away customers, she claims, many of whom believe the cause of death was something to do with the café itself, rather than the amount of time Chuang Cheng Feng spent playing the game without interruption.

"I am afraid that recent events have been catastrophic for my business," the café's owner tells me via a translator on the phone. "It's suffered a huge slide. I cannot talk to you about what happened. I want us to stay out of the news now."

Internet cafés are more widespread in Taiwan than in the west. For young players it's more economical to play games at one of these establishments than at home. Two dollars buys eight hours of game time. Take into account the cost of a broadband connection, a PC, electricity and the games themselves, and an Internet café is the most affordable location in which to play an online game.

Big City is one of the larger café franchises in Taiwan. I call a branch in the Yongkang District of Tainan, 15 miles from the café where Feng died.

"Yeah, since the news of that death, business has been different," says Lian, the 25-year-old staff member who answers the phone. "It's far quieter than usual. It seems probable to me that this downturn is somehow linked."

"Are you worried that the same thing that happened ►

in Yujing might happen in your café?" I ask.

"Of course," she says.

"Have you taken any measures to prevent a similar tragedy?"

"Headquarters held a meeting after Feng's death," Lian says. "After that, employees were issued with new guidelines, asking us to pay closer attention to customers. We have been told to issue a verbal warning if we notice any customer sitting at the same terminal for too long. To be honest, though, I haven't noticed anyone behaving in the same manner as Feng did."



little farther north, 27-year-old Huang, branch manager of the Ingame Café, is more willing to admit that people playing games for prolonged periods of time is an issue.

"Our business has been mostly unaffected by the recent death," she says. "We do have customers like that, who stay here for a very long time. Not many, but certainly a few.

But I'm not really worried that something like that might ever happen here. We have a system to prevent customers from sitting in front of the computer for too long."

"How long is too long?" I ask.

"We don't allow any customers to play for more than three days at a time. Once it gets past that amount of time we ask the customer to go home, rest and refresh. This is a well-organised Internet café, you see." She pauses for a moment. "You know what? Don't even mention three days. In fact, I just asked a customer to leave who had been here for over 24 hours."

"Why?" I say. "Was there a problem?"

"Other customers had started to complain about his smell. So I asked him to leave. In my experience, no one tends to play a game for longer than a day and a half at a time."

When it comes to apportioning blame for the deaths of Rong-Yu, Feng and all the others, Miss Huang is unequivocal.

"The problem with this sort of addiction stems from those addicts themselves," she says. "It's probably their family or their education that's to blame. It's really a matter of self-discipline."

Since the 1970s doctors have believed that it's possible for a videogame to trigger a heart attack in a person with a weak heart. In 1977 the cardiologist Robert S Eliot used *Pong* to replicate stressful situations for his cardiac patients at the University Of Nebraska Medical Center. He studied more than 1,000 patients, monitoring the game's effect on their heart rate and blood pressure.

"We have had heart rate increases of 60 beats per minute and blood pressures as high as 220 within one minute of starting a computer game," he said at the time. "It happens quite a lot but the patients have no awareness."

In fact, Peter Burkowski's autopsy in 1982 found that the young man had scar tissue on his heart that was at least two weeks old. The coroner recorded that the stress of the arcade games Burkowski had been playing triggered the attack in his weakened heart, lending credence to Dr Eliot's claims.

If Rong-Yu's death was, as Miss Huang believes, a failing of self-discipline or some other non-biological defect, then it's important to establish that his heart attack wasn't due to a preexisting medical condition.

Dr Ta-Chen Su is the attending physician and clinical associate professor at the Department Of Internal Medicine, National Taiwan University Hospital. The number of cases of young men dying while playing games is too few to have inspired any specific research into the phenomenon. But Su has a personal interest in the subject: Rong-Yu was his patient.

The NTUH is housed in a grand redbrick building, fronted by pairs of Doric columns that bite into the pavement by the side of a Taipei main road. Outside, the oily scent of traffic hangs in the air, while the interior is all disinfectant and white fluorescent lighting.

"It wasn't reported, but last year Chen had a heart attack and was transferred to the hospital for evaluation," Dr Su tells me. "During his hospitalisation the checks included echocardiography, 24-hour electrocardiography, cardiac catheterisation, coronary angiography and cardiac electrophysiology."

But the test results showed no signs that Rong-Yu had a heart problem that might lead to sudden death. The young man's unexpected heart attack was something of a mystery. Rong-Yu refused the doctor's recommendation to have a cardioverter-defibrillator fitted. Moreover, when he discovered that there was nothing wrong with his heart, he declined to have any more cardiovascular tracking, which might have explained the attack. Three months later, Rong-Yu was dead.

"As we can eliminate any preexisting heart problems from his cause of death, he must have died from another cause," says Su.

Dr Su believes that there are multiple possible causes of death for Rong-Yu, as for the other people who have died while playing videogames in Internet cafés.

"Acute autonomic dysfunction is the first potential cause of death," he says. "Videogames can generate a great deal of tension in the human body." The player's blood pressure and heart rate rise. If this excessive tension is maintained for more than ten hours, it can result in cardiac arrhythmia and sympathetic-parasympathetic imbalance, also called acute autonomic dysfunction."

Videogames deal in tension and peril. This is true of most fiction, in which conflict is necessary to create drama, but in most videogames the player is the subject of the stress and conflict. The conflict is necessary for the sense of triumph, release and learning that comes when it's overcome. But Dr Su warns this cycle of stress and release, when prolonged, can have physiological effects.

"Even if the game is not especially stressful in this way, simply playing for such a long period of time

can prove fatal," he adds.

Dr Su compares playing games for days at a time to putting in unhealthy amounts of overtime at work — something that leads to exhaustion of the mind and body. In Japan, enough people have died at their desks while working overtime that the Japanese invented the term 'karoshi', or death by overwork. In 1987 the Japanese Ministry Of Labour even began to publish statistics on karoshi. The International Labour Organization (ILO), a United Nations agency that deals with labour issues, has published an article on the phenomenon, warning that all-night, late-night or holiday work for long and excessive hours can lead to a worker's death. If death at the workstation is a frequent and well-documented occurrence, then death at the PlayStation appears to be the flipside of the same coin.

The third potential cause of Rong-Yu's death, according to Dr Su, is what doctors refer to as 'Economy Class Syndrome'.

"Many studies show that maintaining the same pose for hours at a time without moving your body, especially your legs, can cause deep vein thrombosis," he explains. "Moreover, if you don't drink and eat properly while in this position, your blood can become sticky, leading to a

Rong-Yu's death is a whodunnit of sorts. It's not a crime that can be easily pinned on any one person or thing. There's Taiwan's local economy and infrastructure, which promotes the extended use of Internet cafés. There are the natural conditions of the country's humid climate. There's the lack of regulation with regard to how long people can use these cafés and, of course, there are the videogames themselves, which promote prolonged engagement through their elegant, compelling design, often iterated upon hundreds of times to inspire humans to willingly offer their uninterrupted attendance and attention.

But there is another, more pressing, more interesting question that arches over all of these, one that is, perhaps, more relevant to the billions of people around the world who play videogames and don't wind up dead from doing so: whydunnit?

What is it about this medium that encourages some people to play games to the extremes of their physical wellbeing and beyond? Why do videogames inspire such monumental acts of obsession? Is it something within the game's reality that proves so appealing, or is it external circumstances that push certain people to take refuge in a cosy unreality?

What is it that encourages some people to play games to the extremes of their physical wellbeing and beyond? Why do games inspire such monumental acts of obsession?

pulmonary embolism and sudden death."

The final potential cause of death is linked to the cafés themselves, specifically their conditions. Taiwanese Internet cafés typically have poor ventilation and offer players only a cramped space to play in. One recent study found that the air pollution index in Internet cafés often exceeds safe levels. Most establishments have dedicated smoking zones on the premises, but while air conditioners cool the air temperature, they don't improve its quality.

Taiwan in particular is a humid country. Relative humidity usually remains at 60 to 90 per cent, conditions that help fungi, bacteria and dust mites to flourish in a confined space. According to Dr Su, these can stimulate asthma and other allergic syndromes. Severe air pollution can have a devastating impact on a human's heart and blood vessels, increasing the possibility of blood clots, raising the heart rate and blood pressure, stiffening the arteries and having a negative impact on haemodynamics.

None of this explains the apparent rise in these deaths, however.

"It's because more and more Internet cafés are opening and the number of people taking up online gaming is increasing," says Dr Su. "The content of online gaming is improving and growing more attractive than ever. I believe that, if café conditions don't change, we are going to see more deaths."



ames offer conflict within safe bounds, so perhaps it is to do with the human desire to be heroic, to perform acts for which they might be remembered, a way to stave off death's great whitewash.

Or is it the competitiveness of the athlete: the desire to win and assert dominance over our peers and rivals? Or is it to do with friendship and community, or showboating and braggadocio?

Videogames offer the intrigue and joy of solvable mysteries. They also grant access to mysterious places in need of discovery. Through them we have the opportunity to, like our ancestors, become explorers when Google satellites have mapped every inch of our own world, leaving few places where we can truly explore the unseen.

Glory, justice, immortality; a chance to live over and again in order to perfect our path, a place in which change and growth in us are measured in the irrefutable high-score table. Videogames offer all of this and more. The allures of the videogame, and the ways in which it salves our internal problems and instincts, are myriad. Is it so curious that a person might become forever lost in this rift between the real and the unreal? ■

T H E M A K I N G O F . . .



N E V E R A L O N E (K I S I M A I N N I T C H U N A)

How community matters and creative constraints helped
Upper One make the breakout culture videogame

By **MATT CLAPHAM**

Format PC, PS4, Xbox One, Wii U
Publisher E-Line Media
Developer Upper One Games
Origin US
Release 2014

Kids' exposure to videogames has raised a number of concerns in society at large, but contracting rabies is not traditionally one of them. For a brief window early in *Never Alone's* development, however, that worry was very real in the Alaskan Native community, and it nearly made Upper One's culturally rich puzzle-platformer a wildly different proposition.

Art director **Dima Veryovka** recalls that greenlight meeting vividly: "We came to Barrow – it's a major city in the Inupiat world; around 5,000 people live there – we get in there and we show the game [prototype]. Everyone really likes pretty much everything, but one lady approached us and said, 'Do you really think the fox is the right character?' And we say, 'Oh, is there anything wrong with that? We like it a lot.' And she said, 'Yeah, we like it too, but one of the things we're teaching our kids is not to play with the foxes, because they have rabies.'"

It sparked three months of experimentation. The development team was definite on a girl as the lead – that much was stipulated by Cook Inlet Tribal Council CEO Gloria O'Neill, whom storyteller and cultural adviser **Ishmael Hope** credits as having come up with the idea of making a game to communicate Alaskan Native culture at all – but which animal would best complement her? A dog, wolf and owl were all tried in the companion spot, but none quite fit it. "The wolf is too strong of a character," explains Veryovka, "and you really don't know who is more important then, who is leading... And, for example, if it's a flying character, it would be really hard to combine both designs."

The barren Alaskan ice floes not being overabundant with suitable animal sidekicks, the team eventually came back to the fox as the best possible match. This time, they presented it alongside the other options they'd considered. "They basically said, 'Yeah, we understand. You guys tried. OK, use the fox,'" says Veryovka. "That's why it's very interesting to work with the community, because everyone had a little bit of a different perspective on that. We also worked with Ron Brower, [an elder] who told us he used to have a fox as a pet, and said it was totally fine for him to see one as a second character."

Three months to close that loop could easily be read as three months wasted. But while *Never Alone* faced all the hurdles of being designed by committee, both the development



Kunuksaayuka isn't the only tale *Never Alone* adapts, but it is the game's backbone. It was once just one of four threads

team and the cultural advisers see that process as inextricable when creating an authentic showcase for thousands of years of culture. For Upper One, formed in a collaboration between CITC and E-Line Media before being absorbed by the latter in mid 2014, the game had to be made in service to the Inupiat heritage, not simply dressed up in its furs-and-ice aesthetic.

"YOUNG NATIVE PEOPLE ARE GOING TO PLAY OUR GAME AT THE LIBRARY, AND PLAY IT MORE THAN MINECRAFT"

It was a mammoth challenge for a dev team that started out with just four members and had to expand to 26 to cope, even if that core did include such industry veterans as former Crystal Dynamics general manager Sean Vesce as creative director, ex-Next Generation magazine editor Grant Roberts as lead game designer, and Veryovka, who had worked at Sony as a character artist for almost seven years. They picked Unity for its ease of use, despite little familiarity with the engine. They chose to build a puzzle-platformer because it best communicated the values that they sought to present, despite backgrounds in shooters and adventure games. But while *Never Alone* was a risk, that was primarily because every facet of it had to be shaped around uncommonly complex subject matter, and there was no template to follow.

Initially, there was some scepticism among the natives – after all, they had seen their culture

misappropriated by outsiders before. But the supreme effort to make *Never Alone* authentic has instead forged powerful bonds. Veryovka talks of being received like part of the community itself in post-game visits, but maybe it's Hope's indigenous perspective that's most telling.

"I would say this is the first time I've ever had this experience with fully integrated deep listening and trust, and this kind of level of collaboration, which is kind of amazing for a bigger project," he says. "I have a lot of background in theatre, and I've just never had that kind of collaboration unless it was totally controlled and made by only indigenous people. So it's just really amazing to have this kind of thing happen, and hopefully it is an example to people. It helps to make a better game, and it helps the process to have this collaboration. You can't just appropriate other people's cultures."

Making games this way imposes a lot of demands. The team would communicate with its cultural advisers at least once a week over Skype, but every milestone meant climbing on a plane to travel from Upper One's Greater Seattle base to Alaska. It's a poltry 1,447 miles from Seattle to Anchorage by air, whereas Barrow, which sits at the very northernmost tip of the state and above the Arctic Circle, is closer to 2,000 miles, and took over seven hours on a plane to reach. Veryovka made that trip three times along with creative director Sean Vesce, and over 12 to Alaska in total. As with everything involved in the process, their effort was reciprocated, with Hope and others coming out to Seattle to advise as well.

The cultural authenticity of *Never Alone* among videogames is almost unparalleled as a result, with just a handful of works able to claim nearly so rich a representation of real-world beliefs and stories (*Okami*, *Engare*), and none with anything near the commercial success. And Upper One team has seen the ripples of its dedication stretch as far as industry awards, earning a BAFTA for best debut as well as a nomination for an SXSW Innovation Award.

Still, you get the feeling that matters less to them than how *Never Alone* has gone down with indigenous Alaskans, especially children. "I've heard from librarians – and often libraries are at the centre of many villages; the school library, 'cause that's the place you can get Internet – there were librarians that were telling me that young native people in the villages of ▶

Alaska are going to play our game at the library, and they're playing it more than *Minecraft*, which is so amazing to them," says Hope. "It gets [kids] to connect and to talk to their parents, to their grandparents, about who they are."

Veryovka echoes that: "Last October, we went to a Youth & Elders Conference in Anchorage, and it was awesome. We met a lot of kids there playing the game, and some said, 'I'm really excited; I'm really proud to be Alaskan Native. This game makes me proud about my culture.'"

That was always part of the point. In a world where the Internet exposes children to countless influences, Upper One was tasked with updating an oral tradition that stretches back thousands of years to face the challenges of modernisation. In addition, it was meant to share Inupiat values with the world by merging mechanics with theme.

One of the key concepts for Hope was interdependence, a trait demanded by one of Earth's most extreme climates, but *Never Alone's* values are far more subtle than mere practical necessity. "We need to rely on each other when we're out in the Arctic," Hope says. "The Nuna and fox characters really have to work together to get through all that terrain, to get through the game. And then it's really the Inuit spirit, the voice of the elders, letting that really come out as much as possible. So people can feel a sense – they hear the language, hear the Inupiaq elder talking – that it's based on directly the elder's words. Which, to me, is utterly beautiful, even spiritual."

Spiritual. It's an odd word to connect with games, where matters of real-world faith are paid about as little mind as ancient cultures, unless you count the 'multicultural team of various faiths and beliefs' talisman that hangs around *Assassin's Creed* neck to ward off offence. But being based on a tradition that views the spirit world as suffusing the one we share meant the spiritual became integral to *Never Alone*, and another tricky patch to negotiate for the design team.

As Veryovka explains, at first Upper One over-gamified it. "That was the most challenging part: for us to figure out what the spirit world would look like. Because at the very beginning, we had a design where you press a button and go into the spirit world, and then you press the button and you go back into the normal, the real world. And that kind of worked out as a design, but when we went back to our advisers and to Ishmael, it just didn't really feel right, because [they see it as] only really one world, and spirits coexist in this

Q&A

Ishmael Hope

Writer, storyteller,
cultural insights



What did you see your role as?

What I really tried to contribute throughout was just the value of the elder's voice – that our stories, and the storytellers from our corner of the world, are absolutely amazing.

How did you come to settle on the story of Nuna and the fox?

Really, I think the team decided on the main characters before we decided on the story we'd shape it around. And I think that really there's a need for telling stories of women and young women and, from my indigenous perspective, I think that's absolutely fitting to have a story of empowerment for young women.

During development, how much did you see yourself as a cultural ambassadors?

You know, I think what's neat is we're really emphasising that games can be a powerful medium for telling stories, for engaging in a story. So many people seem to comment on how they feel like they're in that world. And that was absolutely what we were thinking about throughout... A different type of game may de-emphasise the story and have it just be about mechanics, puzzles and getting through things, and that's the meat of the gameplay. But we were really engaging [with the story], having it not just be a side thing.

Is it an spiritual experience playing it now?

When we're out in that world, it feels that the elders support it. That they like it! At least the elders I've talked to. And, for me, that's the utmost validation. And when we hear James [Nageak]'s voice, and it's all coming together, and it's both respectful but creatively interesting, I'd say, yeah, it's spiritual experience.

world. So for us it was, on the design and on the artistic side, kind of how to create it lightly."

His solution was to listen and then seek out artefacts to inspire the spirits that would become prolific throughout *Never Alone*. They come in many forms – and distinct roles, some spirits offering helpful platforms, others presenting a hindrance – but in the final game, all draw on a common embodiment of how the spirit world is interwoven with ours. "It really resonated with me," Hope says, "Dima's choices on the spirits – you know, those helping spirits in the game that the fox brings out and then they appear, and [the players] are able to jump on and get to the next

part? Those spirits that come out are inspired by masks. The Northern Lights that swoop down and they're trying to take the people away, that's inspired by the mask tradition, too. And that absolutely resonated with me, because those are spirits [as well], and I've heard a few elders talk about how masks are the incarnation of spirits. It's a visual representation of how the spirits are seen by the people. So that was a nice choice, that fit, that you can only make by having that depth of collaboration and that amount of research."

While Upper One's attempts to truly understand another culture involved many false starts, they would also produce a serendipitous by-product: the game's lauded cultural insight videos, unlocked as you progress through the story. From Veryovka's perspective, while the intent was always there, these came together almost organically. "The initial idea was hearing the voice directly from the community," he explains, "and we were trying to find a way to put something like that in the game. At the very beginning, we created really basic visuals and in the background we put some lady talking in the Inupiaq voice and we thought, 'That's fascinating; that's completing the world...' During the whole development, we interviewed so many people. We recorded around 40 hours of documentary, and not sharing these documentaries, because that's the gems, it would be almost criminal."

For all that *Never Alone's* development process pulled it in many different directions, and through some awkward phases, Veryovka believes building this relationship really is the only way to make a game with cultural import. Much like surviving in the Arctic, only mutually beneficial collaboration will see vibrant cultures emerge from the development wilderness intact. E-Line has already stated its intent to create more 'world games' via Upper One, but Veryovka wants to see others follow the studio into the territory he and his team have only just begun to chart.

"I personally feel there should be more developers doing the kind of work that we did, because it's such an important work," he says. "The only thing, as advice: don't take a shortcut. What I personally don't want to see is people just researching on Wikipedia and visiting once or twice to create games, because it's not going to be a truthful representation. If you really want to make a game about the culture, this kind of collaboration is absolutely essential." ■



1 Barrow is the US's northernmost city, and spends two-thirds of the year below freezing point. It's also a major centre of Inupiat culture.

2 Minnie Grey (left) is the daughter and eldest surviving relative of Robert Cleveland, the storyteller of *Kunuksaayuka*, which was adapted for *Never Alone*. She also features in the game's cultural insights.

3 Several levels were scrapped for the final game, but the ice floes that remain are moody and evocative.

4 Cook Inlet Tribal Council guided *Never Alone*'s development.

5 The team extensively researched the setting and culture to ensure the game's eventual authenticity.

6 The Smithsonian Arctic Studies Center in the Anchorage Museum, and its 600 artefacts of native life, proved an invaluable resource for the *Upper One* development team.

7 The Scrimshaw style of the cutscenes was inspired by one particular piece: a carved pipe. Veryovka was taken with not only its beauty, but how it told a story





STUDIO PROFILE

FREEJAM GAMES

Inside the studio that wraps
the fury of vehicular combat
around a sensitive core

By WILL FREEMAN

Freejam's founding quintet
(from left): Sebastiano
Mandalà, Edward Fowler,
Brian O'Connor, Richard
Turner and Mark Simmons

With rare exceptions, game creators aren't expected to be emotional beings. Certainly, few devote much time to talking about their feelings publicly. *Robocraft* creator Freejam, however, is quick to admit that it is comprised of a naturally soft bunch whose lines of code are easily tangled with their heartstrings.

The studio's five founders – all former staffers at Climax Studios – are a jovial, self-deprecating group, but certain themes come up too often to be entirely tongue-in-cheek. Building this game has clearly been a none-too-smooth journey, with moments of heartache and turmoil.

But Freejam is no niche romanticist; it is constructing an F2P action title, and a successful one. *Robocraft* is an online PvP vehicular shooter that's long been in open alpha, and lets players build their own craft from a stock of parts and basic shapes. It is Freejam's first creation, and at the time of writing boasts some 200,000 players returning to the game every day.

Ever since the launch of the stripped-back combat demo in April 2013, the community that props up *Robocraft*'s ongoing development has been notably close to its evolution. While the game as it is today would not exist without those fans, that lack of partition between developer and player is also the primary reason why the team's emotional vigour is tested so regularly.

"I do find it pretty stressful at times," admits Freejam game director **Mark Simmons**. "It can make me feel sick when a player is saying something in development is bad, and we know it's bad. It can be emotional, honestly. I think all of us are maybe a bit soft. We really take all the community input to heart."

In a post-Early Access and post-crowdfunding era, it isn't unusual for developers to be reliant on communities. Yet Freejam's pre-launch userbase is especially close to the studio itself; some 10 per cent of the full-time in-house workforce are former players, and there are also *Robocraft* forum members that the founders meet for drinks.

The reasons for working with the players so directly are manifold. When *Robocraft* was conceived, the founding quintet knew that making room for user-generated content was a route to producing more game than they could possibly create alone. "If the users were contributing, we knew we'd have a game that could be much bigger than us, because we'd see – hopefully – our users creating content, building the game beyond what we could do," Simmons says.



While conflict forms the core of *Robocraft*'s gameplay, it has also often been a central theme in the game's development

But as the team broke away from Climax – whose studio space overlooking the waterfront in Portsmouth it now shares – the founders also developed a self-confessed obsession with the lean startup theory, a business development model proposed by Silicon Valley entrepreneur Eric Ries in 2011. It promotes experimentation, iteration of ideas, and a deep understanding of your early target customers, and this shaped Freejam from the day it began.

"We knew we wanted to involve the community right from the start," says senior

"IT'S A GOOD THING THAT WE CARE AND FEEL THE FEEDBACK. BUT IT CAN, IF I'M HONEST, MAKE DECISION-MAKING HARD"

programmer **Brian O'Connor**. "And because we started small and lean, we really had very few users when we started. That meant keeping an eye on what every individual was saying, trying to get feedback that way. That established a constant close relationship."

The player numbers in *Robocraft*'s early history were at times remarkably low. The team recalls mornings where little development work was done because so few players were online, and the founders themselves had to join sessions to keep up the numbers. But low player tallies at this early stage didn't worry Freejam one bit. It had built a demo that was little more than a hint of what it had planned to come, and it had done so with intent. This was only a way to test the concept, and to establish a base that could support rapid prototyping.

"At that point, [the players] were the sixth member of our team," says art director **Richard Turner**. "We used them as part of the process to build, to generate statistics and to get feedback, and Mark built a good line of communication



Founded 2013
Employees 30
Key staff Mark Simmons (game director and co-founder), Sebastiano Mandalà (CTO and co-founder), Richard Turner (art director and co-founder), Brian O'Connor (programmer and co-founder), Edward Fowler (programmer and co-founder)
URL www.freejamgames.com
Current project *Robocraft*

with those early community members, emailing them directly, involving them."

Skip ahead to 2015 and many of those early players remain important to *Robocraft*. But pleasing that audience – and knowing when to turn a blind eye to its insights – is the factor that prods at the sensitive spots on the team. "I see people complaining about this product that we love, and I feel like I want to be sick," says CTO **Sebastiano Mandalà**. "For us, it was natural to want to please people. You could call it an instinct. Communicating came from an impulse.

"[Our feelings] can be a real strength for the studio, because we do really care, and we listen, and that helps the game. So it's a good thing that

we care and feel the feedback in this emotional way. But it can, if I'm honest, make decision-making hard sometimes, when we feel something we want to change for the greater good, but the community doesn't see it."

As such, the team has to be careful not to be ruled by its fan base. Some of the hardest choices Freejam has made have defined the success of *Robocraft*, even if it has meant risking the ire, and possibly dissolution, of its audience. As spring 2015 drew close, for instance, the *Robocraft* team introduced respawning to online battles, presenting a significant shift in gameplay dynamics. Ever aware of their players' whims, Simmons and his colleagues revealed their plans to the community, and many reacted less than positively to the news.

"People thought we were going to kill *Robocraft*, so we even kept the old version in, which we weren't planning on at all," Simmons says. "That was the influence of the community, but now we have five times as many people playing the new mode as the old one." ▶



Around one-tenth of the *Robocraft* team (left) were recruited from the game's own player community. Today, they and their colleagues share office space on Portsmouth's waterfront with Climax Studios, the outfit at which Freejam's team of founders met each other

It's a growing community, though, and that means it's even harder to manage expectations. For a period, the team had grown familiar with seeing concurrent user numbers hover at around 100. Then 2,000 were apparently tackling the game simultaneously online. Immediately, a scramble to find the bug responsible for the anomaly began. Devoted players even started sending in reports of the code malfunction.

But there was no bug. Rather, a mid-tier Polish YouTube personality with 50,000 followers had covered the game, prompting a slew of sign-ups, and the realisation for Freejam that multilingual support was now a priority. It wouldn't be the last spike. Later came the move to Steam – a decision a handful of users again took umbrage with – but now 70 per cent of *Robocraft*'s audience play via Valve's storefront.

The appeal isn't hard to pin down, the game mining the same seam of player creativity and simple click-together materials that powers the all-conquering *Minecraft*. While Markus Persson's handiwork clearly holds significant influence over Freejam, it's a deeper connection than merely another indie eyeing up Mojang's success. In a previous role, Simmons was asked to prepare a pitch for taking Notch's cultural phenomenon to a new platform. It came to nothing, but all that playing for research turned into a fixation.

One of the most significant challenges for *Robocraft* was differentiation, since anything even like a clone would be joining a crowded market. Quickly the team struck on the idea of balancing objective-led gameplay with accessibility, and committed to a free-to-play model.

"Our contrast to *Minecraft* is that we flip its openness on its head," Simmons explains. "We give our players very clearly defined objectives. There's simplicity for our players in understanding why they are building, and what they're building for. That's important, and it separates us."

It's a model that Freejam is convinced is behind the praise that has accumulated in user reviews (though the Steam page has more than its fair share of vocal players frustrated by recent changes too). It is also why it feels other crafting-focused games can struggle to find an audience.

"I'm not a *Minecraft* player, really, but when I see the other games of this type – and maybe those that are closer to *Robocraft* – they are too complicated," Mandalà says. "They try to do too much, when we've tried to keep a simplicity."

"Many who have emulated *Minecraft* have focused on sandbox game design, while we've not done that," Simmons says. "We've made a PvP-based combat game."

"OUR GAME'S CONSTRUCTION IS STILL AN EVOLUTION. IT'S STILL CHANGING. THAT'S THE BEAUTY OF OUR PROCESS"

'Made' is premature, however, since the fact that it continues to be in open alpha could soon become *Robocraft*'s most infamous facet. But Freejam's founders offer little defence for the longform alpha model.

"Being in open access for a long time means a lot of technical challenges," says Mandalà, who can reel off a list of technical reasons why a final release will help him sleep more peacefully. "We are far from being perfect there."

The team also admits it still isn't quite sure what the release version of *Robocraft* will look like. "There's a big green button in Steam, and we could click it right now and release, but we don't know what it really does," O'Connor laughs.

"Does it really mean anything?" asks Turner. "Perhaps it just tells everyone else you're more polished than you were before you pressed the

button. But our game's construction is still an evolution. It is still changing. That's the beauty of our development [process]."

"Maybe the button just means people will expect more and stop defending us," Mandalà says, to the amusement of his colleagues.

But the team knows it can't dodge the issue forever. "When we've got rid of all the bugs and worked out the features, then we will polish it and release," Simmons explains.

Freejam in many ways typifies the modern mid-sized indie that it has become. The open development model is increasingly prevalent, and the founders make a point of repeating that they

don't see themselves as wildly distinct. They just have faith in their take on making games.

"I honestly don't think we've got any secret ingredient nobody else has," O'Connor says. "But maybe it's like making a pizza. The measure and mix of all our ingredients makes for a really great pizza. We have a great package here of game, studio and community. We've devoted a lot to our community, and there's been a vast return in that investment."

The team all nod in agreement with the culinary analogy, except for Mandalà, a Sicilian currently building his own pizza oven at home. But before he can fire off more than a few words of objection, his fellow founders have unleashed a volley of laughter. It's a sound never far from the desks of Freejam, regardless of the studio's stern ambition for *Robocraft*. ■



1 Robocraft's evolution from a rudimentary demo has seen several step changes in its formula. With the 'DOTM' revision came the Megaseat, enabling larger creations.

2 As its maker's name suggests, Robocraft is an F2P title; purchasable prebuilt robots, such as the T7 Scorpion Walker, are one revenue stream

3 Cubes are the base raw material available to Robocraft builders, providing form and function to their constructions



PLAY

REVIEWS. PERSPECTIVES. INTERVIEWS. AND SOME NUMBERS

STILL PLAYING

The Witcher III: The Wild Hunt PS4

A return trek allows us to luxuriate in this world's finer details, but only puts its early narrative oddities in starker relief. Geralt begins travelling light, without money, loot or witcher's brews, but pretty soon you'll be filling his saddle bags with Buckthorn and Balisse Fruit, coin and armour. It makes for a better gameplay arc and we could do without more amnesia plotlines, but it's a blinkered reset all the same.

Trials Fusion PS4

Riding a crudely simulated unicorn through buggy courses created in an engine made with trial bikes in mind is even less fun than it sounds. Thank goodness, then, that *Trials Fusion's* Awesome Max Edition DLC is flanked by a selection of proper tracks – built by Red Lynx staff along with some extremely talented players – to help wash away the stench of horse manure.

You Must Build A Boat iOS

EightyEight Games's match-three dungeon crawler takes some getting used to. Its puzzle grid is set on rails, so directional swipes move not just the desired tile, but the entire row or column. It's pacy, too, both in its action – enemies attack automatically every few seconds, so speed is king – and its progression, with a steady, pleasant flow of unlocks and upgrades.

Thankfully, it's also cheap, a paid download that's completely free of IAPs.



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Your story

Player freedom is a phrase often bandied about by developers keen to sell the entertainment value of their open worlds, but the reality is rarely unconstricted. You might be able to head off in any direction, but you'll still have to find a way of opening that bridge to the next island or wait until the right point in the story to trigger a progress-heralding cutscene. *Her Story* is a much smaller proposition than *Grand Theft Auto* and its ilk, but it does something no other sandbox will allow: it lets you jump to the end right from the start.

Whether you understand what you see when you get there is another matter entirely. But if your investigatorial tenacity happens to conjure up the right search term on your very first try, the game's biggest plot twist will be laid bare to you. It's a bold, even fearless, design. *The Swindle* also wants to offer you your freedom, albeit it within the context of a more traditional progression path. But while you'll

have to amass enough money from your heists to access each new district, how thoroughly you scour each level and which upgrades you select along the way are entirely down to you – and this in the context of a procedurally generated game that's happy from the off to throw rooms at you that are unsolvable without later upgrades. Once you have a selection of tools, however, this dynamic shifts as multiple ad-hoc solutions to most problems present themselves.

At the other end of the success spectrum, however, is *Fallout Shelter*. A spinoff from a series famed for the relative freedom it offers players, and one that purports to let you manage your very own Vault, Bethesda's first free-to-play iOS game initially appears to deliver. But all too soon, the reality of its limited building blocks and repetitive, goalless number crunching becomes all too apparent. Far from freeing the player, it attempts to enslave you.



Her Story

While to some extent the draw of illuminating the unknown is an underpinning for all stories – be it externally to the reader, or internally within the framework of the tale itself – no genre draws on it as explicitly, nor dangles the prospect of discovery so tantalisingly before the audience, as crime fiction. It co-opts the simplest narrative question of ‘What happens next?’ into the complex mysteries of how, why and when a foul deed was committed, conventionally in service to pointing the audience towards the grand unveiling of whodunnit. In works of traditional media, we tend to accept such fiction as ‘good’ when its twists are both well orchestrated and impactful, the plot’s arc elaborately crafted to deploy its surprises at key moments, or to spike expectations set up by clever framing. *Her Story* (written, developed and directed by Aisle developer and *Silent Hill: Shattered Memories* scribe Sam Barlow) hits many of the beats of and touchstones for a good crime story, but it is far from traditional, abdicating a generous measure of authorial control by allowing you to dictate in which order you experience this tale’s twists and inversions.

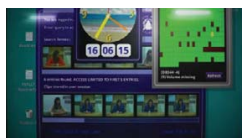
Barlow finds tremendous power in this simple act of surrender. His is a detective story that asks you to deduce, rather than just to listen. It’s a game that requires you to examine statements and use your interpretations of the information presented to intuit your way through the tale. Consequently, it is among a handful of interactive investigations that truly deliver on the foundational fantasy of detective work, an elusive concept in a medium prone to highlighting and handholding. It’s the antidote to games that would rather have you ‘press X to investigate crime scene’ than trust you to exercise the art of deduction.

You’ll do so within the bounds of a taut tale that benefits from a tight focus and exemplary framing. Presented with a pastiche of a Windows 95 desktop, you’re cast as an observer trawling through archived footage taken from seven different police interviews from 1994, each conducted with the partner of a missing person (portrayed by actress Viva Seifert in full-motion video). The intervening years have not been kind, however, and so the tapes have been fractured into clips and jumbled up in a computer database.

New snippets are summoned through a search bar, and while obvious starting terms such as ‘murder’ will get you going, what you enter and where you let that carry you is entirely your choice. The one obstacle is that you’re dealing with a simulacrum of an archaic police system: the LOGIC database will display only the first five results of any query. That means you’ll have to get specific with your searches if you want to recover every last one of the hundreds of shards of the story. While seeing everything isn’t necessary to understand the gist of what went down, part of what makes the

Publisher/developer Sam Barlow
Format iOS, PC (version tested)
Release Out now

Her Story’s only win condition is understanding the tale being told, and its only fail state is to walk away before you do



SPOILER ALERT

As a game fundamentally concerned with its narrative, you’d do well to avoid any discussion surrounding *Her Story* until you have seen as much of its tale as you intend to see, lest spoilers sap away some of the joy of working events out yourself. In this regard, Barlow’s creation is uncommonly vulnerable to the pressures of the broadband age, where exchanges of careless words are commonplace, coalesced and formalised into Twitter feeds and comment threads. Many forum users are respectful enough to use spoiler tags, but even so absorbing too much information beforehand will lead your investigation down inorganic paths. In short, *Her Story* is a game best approached with as open a mind and little foreknowledge as possible.

process of unravelling this nonlinear tale so engrossing is how happening across fresh information recasts the old. As such, tracking down every second of missing footage quickly becomes a compulsion as you grow ever more absorbed in the tale.

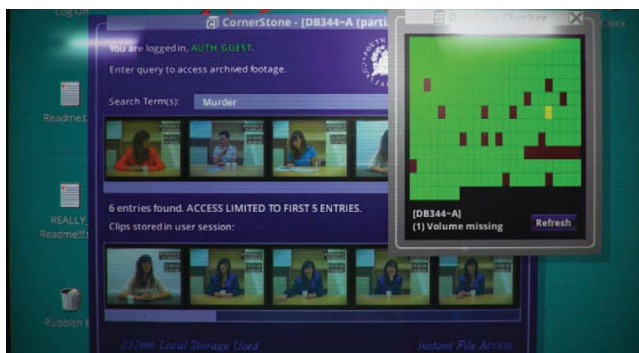
Your progress doesn’t matter for any reason bar your satisfaction – *Her Story*’s only win condition is understanding the tale being told, and its only fail state is to walk away before you do. Still, you can track it via an abstracted database app on the desktop that displays found footage as blocks of green and unseen data in dull red. You can also add tags to clips to make them easier to find again, and sort key scenes into a user queue for perusal later. You’ll be presented with an in-universe way to leave the terminal quite early on as well – another gentle subversion in a game full of the things.

It’s unlikely you’ll want to. Barlow’s devious pen and the answer-only format of the footage throws up plenty of material to deduce from context, a robust web of peripheral detail filling in the unseen world beyond the interview room. And this is the kind of story that videogames rarely care to tell, one based on thorny emotions, irreducible problems and people. Seifert, meanwhile, successfully carries off a nuanced role that demands she combine raconteur, object of suspicion and charismatic lead in one. A few scenes may lack easy credibility, but not everything is meant to be natural – police interview rooms must pay witness to far less watchable performances every day.

What’s most enticing, however, is the joy of picking apart an open-ended tale for yourself. Working theories will be assembled carefully only to be shattered by a gesture, a half sentence or a left-of-field new word, upending your version of events. Even at the end, when you’ll have a fairly firm grip on events, ambiguity still surrounds many of the details. Like a great thriller or TV show, it’s the kind of storytelling that will leave you wanting to swap notes and ideas with others.

The mood is heightened further by a batch of filter effects, and subtly manipulative music, the latter of which builds on the unease of prying into the case and gently amplifies the most powerful story beats when they arrive. While optional, by default the recognisable bulge and scan lines of a CRT monitor adorn the screen, noise and aberrations riddle the video clips, and bars of fluorescent tube lighting hang before your eyes. It’s far from discreet, but it adds a good deal to the distinctly ’90s vibe in which the entire game is grounded.

That mood, and the things you learn through your two to five hours in the cramped interview room, will stick with you long after. Affecting and profoundly different, *Her Story* is a superlatively told work of crime fiction, and one that deserves to shift the conversation around interactive storytelling.



ABOVE The costume changes may seem extreme in screenshots, but they're crucial in keeping the different interviews distinct in your mind. Having a notebook to hand may also be helpful as you untangle the chronology

MAIN Every video has subtitles, and you can scrub back and forth through the footage to see certain sections replayed. This is generally unnecessary, but there are one or two occasions where you might want to retread a chunk of clip.

ABOVE The Database Checker gives you a quick read on how much you've seen, and it can be hard to leave the game alone until every one of those sectors turns green. A random clip command is one way to lever yourself out of a rut.

RIGHT While some clips only set the scene or fill in the background, few feel truly superfluous, and there are far more threads to pull on than simply what happened to the missing man. It feels like a treat when a little observation yields a fresh dollop of information



Post Script

Interview: **Sam Barlow**, creator

One of game development's most unassuming polymaths, **Sam Barlow** is known for blending player choice with his authored stories. In retrospect, *Aisle* (1999) seems like a statement of intent, a text adventure with a single supermarket scene and many possible outcomes. Later, *Silent Hill: Shattered Memories* (2009), which Barlow wrote and designed, featured a psychological evaluation that shaped the rest of the game around your answers. After the cancellation of his *Legacy Of Kain* game, he left mainstream studios behind to create *Her Story*, and its success has surprised the experimental developer in more ways than one.

You wrote, directed and coded the game. Are you handling the PR side as well?

Yeah, I'm doing everything. I've now clocked the people who are pretending to be famous YouTubers asking me for a key for them and their friends. They're very clever. They send you an email, in slightly broken English, that says, 'Oh, I'm blah blah YouTuber. There's a link. I just need one key and then five for my users.' You click on it, and it goes to a YouTube page, and it's usually like a Korean or a Russian YouTuber so I can't understand what they're saying. All I can see is that they've got 20 million followers. So I guess the idea is that you're supposed to go, 'Wow, 20 million followers; I can't read any of this page, so I'm just going to assume it's the guy sending me the email.' Then you look at the email and it's like, 'That email's not mentioned anywhere on his YouTube page.' Maybe these incredibly popular YouTubers are sending me emails looking for keys and I'm snubbing them because I think they're scammers.

Did *Her Story*'s instant popularity surprise you?

Yeah, I was thinking, 'I'll put the game out there; there'll be people who would be naturally interested, because maybe they liked my other games, or because the Indie Fund are backing it.' But I was kind of thinking that over months we'd hopefully get some kind of word of mouth, and maybe over six months it would pay for itself. In terms of press coverage and reviews, I was thinking I'd get a few things here and there, but it'd probably be very Marmite. Stuff like *Shattered Memories* finished on a 79 Metacritic, which is the most painful of all Metacritic scores, because it's green, but it's not real green – not as far as the publishers are concerned. The number of bloody meetings in which I heard, 'Oh, if your team's last score had been 80, we would have been interested.' So that was kind of where I thought [*Her Story*] was going to be. Some people have asked, 'Were you deliberately trying to create a big social media thing? Were you trying to be ambiguous to drive the social media buzz? Were you calling it *Her Story* to create a



Sam Barlow, creator

"It was very intense, because we were just sitting in this small room – there wasn't a point where you could relax"

kind of social justice warrior fracas?' And all my answers were, 'I honestly didn't think enough people would notice or play it for those things to be a big deal.'

What was it like working with just one actor? You directed; did you ask the detectives' questions too?

Yes, so the whole detective side was all scripted out, so Viva was able to bounce off that, and make sure we had the flow. It was very intense, because we were just sitting in this small room – there wasn't really a point where you could relax. At that point, the script was locked and we couldn't change words or anything too much, because I'd crunched everything through giant databases to make sure the structure made sense. And because the focus was purely on Viva as well, for her it was super-intense. As an actor, there's always someone else to come along and share a scene with you, so you can kind of ease off a bit. I think at the end of the shoot, it was just huge relief it was all over and we hadn't forgotten to record or anything.

Some players have been critical of the acting and dialogue. Does that bother you?

As soon as you see anything posted up [online], there's always going to be someone who says, 'Oh, this is the worst writing; this is the worst acting. It's terrible.' Anything's subjective, so it's perfectly possible that's a genuine response. I'd say in general the reaction has blown me away, because in my head it was a very specific thing... I guess people have an appetite for something a bit different.

Were you ever tempted to gamify *Her Story* more?

I was definitely fighting against all the traditional game designer training I've had to not just fill the periphery with stuff. There's part of me as well that – having written all the dialogue for the detectives, having created props and other bits and pieces of support material – was like, 'Well, I've got all this cool stuff I've made. It's a shame not to use it. I could easily throw this stuff in there.' But when I allowed myself to think through that process, the part of my brain thinking, 'Yeah, that's cool,' was definitely the traditional game designer bit, and then the other part was thinking, 'Yeah, but that's going to dilute it.' There's something that's so simple and focused about this idea of the search and keywords, even to the point where the ability to organise and manage the clips is kind of crappy, and that was a choice. I was definitely aware of wanting to [add more], but then just kind of reasserting myself: no, this is the cool thing that feels really nice, and if I keep the focus there, then, yes, it might turn off some people, but I think it's going to be truer to the experience. ■



XBOX

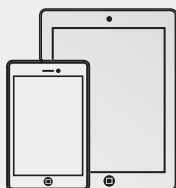
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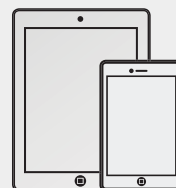


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The Magic Circle

The *Magic Circle*'s game within a game (bearing the same name) is a wreck, yanked this way and that by a precious auteur over years. Pixellated '90s sci-fi spills onto a monochrome waste of RPG clichés; dark forests, skull mountains and hive queens are just some of the discarded ideas that will never be good enough to conclude a hallowed series and be studio head Ishmael Gilder's legacy. Bills are mounting, the team's rabid, and a demo must be shown at E4 in days.

You are handed the task of playtesting this mess, but an introductory trek through a field of placeholders – to a soundtrack of bickering devs – gets you wondering what there might be to test. Gilder changes his mind and deletes assets – and you, even as you attempt to make headway. Fortunately, you're not alone in trying to see the job through. This game wants to be finished, and a discarded protagonist known only as The Old Pro chooses you as the tool to get it done. The Pro doesn't care how or in what state the game gets shipped; he just wants it to be over. There are other interests in play, too: Maze Evelyn, former pro player turned designer, is gunning to get sacked and so escape development hell, while Coda Soliz, intern and devotee from the fan community, has very different plans for the project.

The Magic Circle is remarkable among games with something to say for being eminently topical. *The Stanley Parable* gave the topic of player choice versus narrative design a good thrashing, certainly, but *The Magic Circle* touches on almost every current controversy in addition to its exploration of the roles of creator and player. Developer responsibility when working with much-loved IP, crowdfunding, fan entitlement and deceptive marketing: all are in its sights. And in a testament to developer Question's prescience, events such as Peter Molyneux's retreat from the spotlight and Warner Bros' hasty withdrawal of the underbaked *Batman: Arkham Knight* PC port ensure *The Magic Circle*'s message is cuttngly relevant.

These asides are refreshing, entertaining and distressing in turn, thanks to a robust array of voice talent, including Ashly Burch, Stephen Russell and Ken Levine, who find sincerity in a script that can stray close to overwrought. The irony is that the meat of the thing – a slap to auteurs who assert their vision at the expense of playability – is unmistakably heavy-handed, as if Question was unwilling to follow its own advice and risk for a second that any player might miss its lesson in good game design. Straight-faced delivery by The Old Pro puts paid to the idea that it's all part of the conceit: "If your way does the job, it's more right than they'll ever be."

'Your way' means manipulating the remnants of discarded ideas to take steadily greater control of the fictional *Magic Circle*. After the linear introduction hands you tools of sabotage and creation, you're left

Publisher/developer Question
Format PC
Release Out now

If you want, abominable hordes are yours for the reconstruction, and Question's sermon conflicts with itself here



END IF

The Magic Circle's closing act is sure to be an opinion splitter. The game changes pace, its brakes screeching and tyres smoking, and finds itself – not for the first time – in a different genre altogether. Perhaps a sim might be closest to the mark. Depending on how closely you've engaged with the story, what you've taken away from it, and whether you've put in the hours to uncover most of *The Magic Circle*'s secrets, the ending will be either a crippling chore or a thrilling novelty. If you're finding it the former, the entire section can be bypassed with three keys, but for the latter camp, Question decides to throw metaphor to the wind and takes the opportunity to have The Old Pro deliver a direct and utterly lovely message. If you're the type, of course.

with just one objective – hack the Sky Bastard – to achieve as you will in a compact open world. Drawing 'Life' from cracks in the land gives you the power to restore defunct assets and ensnare AI to modify with behaviours that you've collected at the expense of their previous owners. Name, movement, attack style, special abilities, alliances and enemies can all be corrupted, echoing *Scribblenauts* in the array of absurd outcomes: fire-breathing Cyber-Rats that loathe the sight of Mushroom Wizards, levitating hive-minded corpses, or fireproof quadrupedal Howlers with railguns.

Bottomless wells of Life mean the resource is far from limiting. If you want, great abominable hordes are yours for the reconstruction, and Question's sermon conflicts with itself here. The Old Pro laments the incorrigible design gods who pursue their vision at the expense of all else, but for the duration the player is encouraged to create to excess. A delightfully inventive conclusion, meanwhile, celebrates individual effort. The Pro admits to an ulterior motive, but restricting your Life as an exercise in the kind of restraint and ability to compromise that Gilder lacks might have served both the moral and moment-to-moment puzzles better.

In terms of length, the three-to-four-hour narrative is expertly judged. It says what it needs to, then rolls out a feel-good closing chapter to buoy you up just enough to offset the hollow feeling of maybe having ruined a man's career with a parasitic airborne baby Jesus. The puzzles, on the other hand, lack conviction. Even as you chase its bonus logs and 'developer' commentary, *The Magic Circle* never asks you to test the limits of your custom AI. The elements of a grey matter workout are there – advanced subroutines such as Group Think and Shield Ally provide the basis for a range of multistep solutions – but it's simpler to turn a half-dozen rocks into a roving firewall than to apply any finesse. Maybe it's justified by *The Magic Circle*'s intent never to work against its players, but the path of least resistance is a smooth ride indeed.

The vestiges of the fictional *Magic Circle*'s many different incarnations clash marvellously, its unique and surreal identity set off by similarly absurd mechanics that somehow manage to find context in an earnest human drama. It indulges in jabs at the industry that are unsubtle at times and muddled at others, but the most topical of these hit home, and you will at some point find yourself nodding emphatically in support of the Old Pro trying to bring down the system, of Coda and the fan community, or perhaps of the besieged Gilder himself. It's perhaps not the grand lampoon Question hoped and planned for, but *The Magic Circle* is a valiant modern parable that might also have been an exceptional puzzler, if only it had made its players a little less godlike.



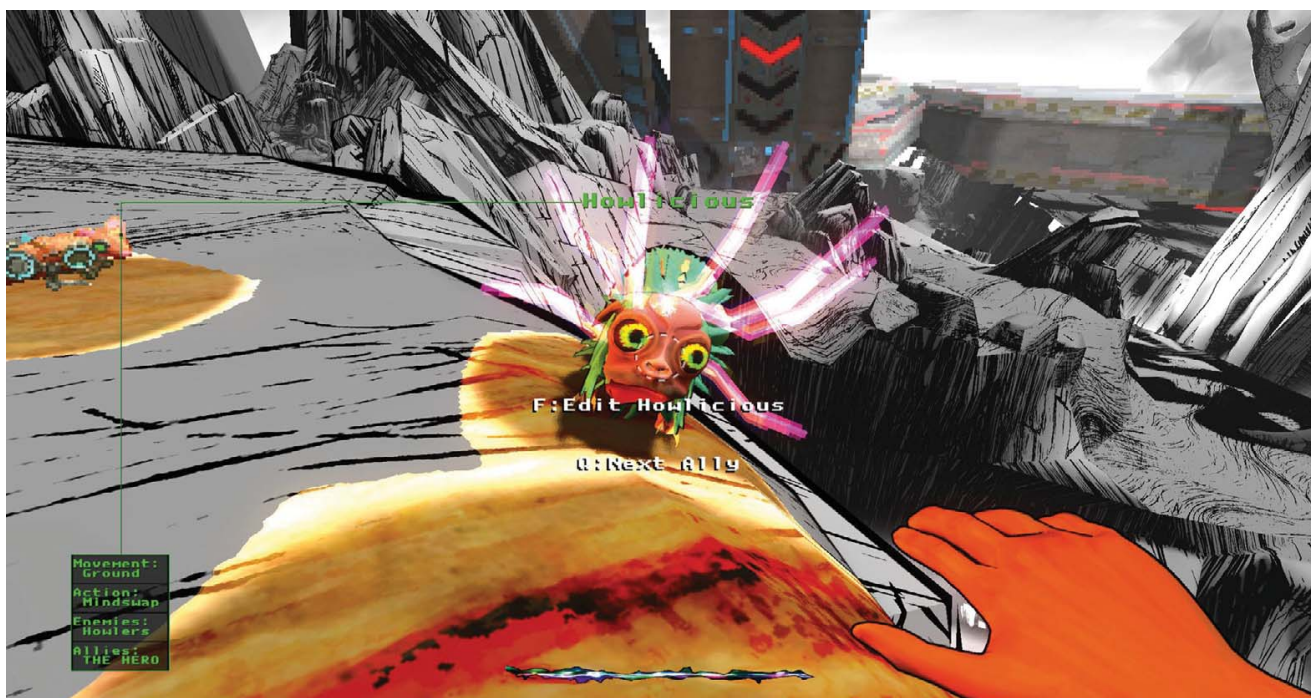
LEFT The bulk of *The Magic Circle*'s first act concerns tracking down the AI subroutines to cross this gap and get at the Sky Bastard.

BELOW Ishmael Gilder's original vision for *The Magic Circle*, featuring the fluorescent fragments of a space station, is invaluable in breaking up the moody surrealist fantasy the game has become.

MAIN The ability to name your tentacled, fire-breathing monsters does mean you'll feel a guilty twinge when reappropriating their legs for the greater good



ABOVE The flurry of work that takes place around you as you play is in aid of *The Magic Circle*'s E4 demo, where legacy and solvency will be decided. It's a clever mechanism for justifying taking a hammer to the fourth wall



The Swindle

The alternate London of high-drama thievery simulator *The Swindle* clearly has many maladies, but prison overcrowding can't be one of them.

Not with intricate home security systems that make a doberman and a shotgun under the bed seem like a welcome mat and a proclivity for brutality among the robotic officers of the law that ensures 100 per cent of caught felons skip the penitentiary and go straight to the morgue. Size Five doesn't simulate blood when you slip up and baton cracks skull, bringing about the permanent end of one of your network of larcenous rogues, but if it did then 'caught red-handed' would quickly lose all metaphorical value in this take on 1849.

That's not really your problem, however. While you do take control of each thief for their platforming-styled smash and grabs, as the detached puppet master behind the entire nefarious organisation, your problem is that soon there'll come a day when there won't be even this much room for naughty men like you to sneak around. In precisely 100 of them, Scotland Yard will be bringing online the Devil's Basilisk and putting an end to your capering days for good.

It's a high-stakes setup that means every time you launch a thief from your airship base into one of the five characterful districts, there's friction. Each heist consumes a day, so steal too little and you'll never be able to afford your passes through the zones to reach the final swindle in time, let alone upgrade your tools. Get slightly too greedy and your take will be nothing whatsoever, since your current meatsack avatar takes just one hit to send off into a dirt nap. Any experience, and thus money bonus, is gone with them – Size Five may offer an endless supply of ne'er-do-wells and bought technologies may transfer to your next thief, but permadeath can still sting.

You will feel that sting often. To say *The Swindle* is challenging is to understate it. At times, playing the game feels like hanging with *Spelunky*'s demanding younger brother. There's the same focus on sweet loot, cash made here either by hoovering up the wads of folding money and contents of easy safes sequestered about these procedurally generated levels, or by hacking computer terminals for massive payouts. There's the same need for precision platforming skill, with only accurate jumps and well-timed strikes of your cosh able to see you through these death traps safely. And there's the same propensity for surprises and hilarious deaths, the game's procedural algorithms spitting out fiendish addresses that combine with the devilishly complex security systems cooked up by Dan Marshall's pernicious mind to deliver uncertainty and cascading chains of disaster. You will fail often, but the way these elements combine to deliver the transgressive thrill of pushing your luck becomes magnetic. If you stick at it.

Publisher/developer Size Five
Format PC (version tested), PS3, PS4, Vita, Wii U, Xbox One
Release Out now

It's worth stealing some time for *The Swindle*: it knows how to serve up a Hollywood heist like nothing else



HACK 'N' DASH

Unlocked right at the beginning of the campaign, the Hack skill is used to add new tension flash points to already nail-biting escapades. Each hackable item – bombs, shutters, mines, doors, et al – requires you to stand still and respond to directional stick press prompts as the camera zooms gradually in on your position, steadily depriving you of peripheral vision. Since not every vision cone can be coshed into submission before a hack is required, timing is everything, and quick responses will be required to avoid detection. Mines and other lethal traps add a further complication: fail a cue or try to step away mid-hack and they will activate. The payoff is that they turn on their former masters, though you still don't want to be standing too close when they're set off.

You may initially wonder if it's worth the bother. *The Swindle* goes too far in its demands at times, but never is that more exacerbated than in an opening that's openly hostile to the uninitiated. Marshall's procedural level algorithm will coldly serve you a flume into a room from which it's impossible to escape without jumping upgrades long before you could possibly afford them, leaving self-termination your only recourse. While you have a wall jump with significantly better reach than your vertical hop, certain stacks of windows are likewise insurmountable until you can double-jump or stick to glass. All-important computers will be suspended in rooms with no doors, asking you to mine them out with bombs you have not yet bought, or materialise in with a teleport you do not have. Two or three bad shuffles close together can be ruinous to your enjoyment. Being screwed over by luck in a game demanding such levels of skill is doubly infuriating – you can't learn from these hiccups, only endure them.

Of course, there's always a solution waiting in the upgrade menu on your airship, but prices are steep and you don't have the days to waste, especially when the fairer-feeling mix of deadly robot guards and cameras present a mighty challenge already. It's not even as if the game is significantly easier on a second or third playthrough – you'll still be rebuffed by impenetrable setups once you've developed the skill to parse the difference between a distance surmountable with pixel-perfect leaps and a flat-out killer of level geometry.

And yet, if you're tenacious and patient, it assuredly is worth stealing some time for *The Swindle*, because it knows how to serve up a Hollywood heist like nothing else we've played. The robot guards are stupid in the best tradition of stealth game guards, programmed to ignore anything in their sight cones except a careless thief. The game's best trick is that getting spotted is far from game over, filling levels with angry red and the blaring of sirens, but also starting an invisible timer until the fuzz arrive. So long as you can dodge traps such as closing shutters, mines, electricity arcs and a dastardly variety of robotic attacks – including, but not limited to, psychotic crow mobs, furnace-like blasts, metal fists and jumping mines – then you can keep pilfering or make good your escape. You haven't got forever: eventually a police gunship will tear through the level and, shortly after, you. But the ratcheting stress of slowly unpicking each room is all the more satisfyingly relieved when it's punctured by a scramble to the exit and you make it to your getaway pod just in time.

So despite its faults – its wilfully mean level generation, its tight-fisted approach to progression, its high barrier to entry – Size Five's once-abandoned crime caper isn't short on roguish charm. Rarely has something so uneven and intermittently frustrating stolen our hearts this brazenly.



ABOVE The imaginative bot types present many nontraditional threats to fall foul of. Rapid escalation means you should treat your first campaign as a primer – it's unlikely that you'll make it to the end without experience

MAIN On-foot robotic coppers are the first to arrive on the scene when a heist goes sideways, and can be dodged with accurate timing and a little luck. The trick is not being followed to your pod, since it takes a few vulnerable seconds to ensure your escape.

ABOVE The highly saturated and detailed cross-section visual style somehow makes even the less salubrious postcodes memorable and luscious. The skylines are full of little details to pick out too.

RIGHT Each new room full of moving parts is usually presented as a discrete puzzle to overcome, but *The Swindle* is wonderfully unconcerned with boundaries and setpieces. Open the wrong door and guards will continue their patrol in the areas beyond, while flying bots can slip up flumes, or stick their lenses up against the glass of external windows



Rise Of Incarnates

When the end of the world arrives, what better way to pass the time than with a brawl on civilisation's embers? In *Rise Of Incarnates*, the first free-to-play Steam release from a team of designers drawn from the *Tekken* and *SoulCalibur* talent pool, humanity's ruined capital cities certainly provide a dramatic backdrop. The London Eye tilts disapprovingly at the fracas unfolding on the far side of a collapsed Westminster Bridge, while the disembodied head of the Statue Of Liberty glares at the air battles brought to New York by this cast of anime-styled invaders. As with *Gundam Vs* – Bandai Namco's two-on-two, arena-based fighting game, which remains highly popular in Japanese arcades – this idiosyncratic brawler lacks the precision of *Street Fighter* and makes fewer physical demands of its players. But matches are bold and memorable, and there's no shortage of mind games to be found within.

Most begin in much the same way: each team member (which can be a bot or a human) picks a target, locks on and streaks towards them over the rubble and overturned cars. The two simultaneous fights find their own space in the arena, until someone defeats their opponent and is freed up to jump into their partner's scuffle. When fighting alongside one another, characters are able to execute powerful tag combos that can devastate a fighter. Teams also share a pool of 'stocks' – six in total – which are depleted each time a competitor is knocked out and respawns. This means a weak partner can prove unusually destructive to a team's chances, even when paired with a competent player, since their losses will quickly drain the shared resource.

The camera always targets one of your enemies, and you can switch the view between them quickly with a tap of a button (the environment itself has little bearing on the action; you can't, for example, send fallen masonry flying at your foes). A double-tap of the jump button also sends your character into a distance-closing dash, the length of which can be extended by holding the button down, a manoeuvre that reduces the amount of time spent trudging across sizeable arenas. As such, each match has a rapid-fire pace. You must remain constantly aware of your position in relation to your teammate and opponents to ensure you're not flanked, causing the action to swirl around the arena.

Regardless of which of the 12 launch characters you choose, or their particular balance of speed and health, their movesets share a common structure: a mixture of ranged attacks, which deal a low amount of damage but are useful for applying pressure or links into combos, and bread-and-butter melee strikes. The button configuration is streamlined and simple, but not, on the whole, at the expense of flexibility or nuance. Directional inputs on an analogue stick act as modifiers to close-quarters moves, turning basic attacks into

Publisher/developer Bandai Namco
Format PC
Release Out now

Fights are far scrappier and more riotous than most of the fighting games you'll see at an EVO tournament

guard breaks and evasive manoeuvres, which can be combined to create rich and varied strings of attacks.

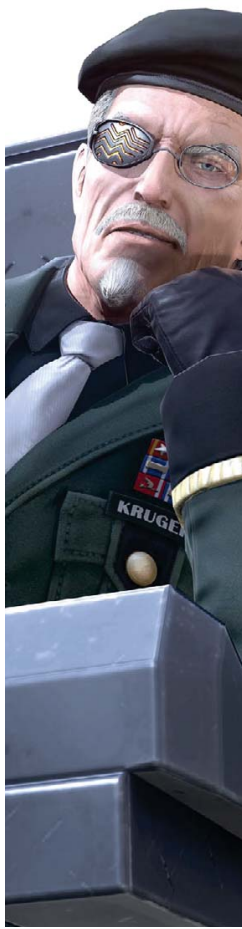
To avoid turning each match into a frantic, button-mashing tussle, there's an action gauge that depletes each time you perform an aerial dash or attack. If this is emptied, you will be left temporarily vulnerable. To add further imposition, ranged attacks and your special moves – which depend on your character but include wide shots, stuns and the ability to become invisible – have separate 'ammo' gauges. Once depleted, you must wait for these to refill over time before you can perform the corresponding attack again.

Many of the game's combatants are able to transform during battle into more powerful mythical forms, known as Daimones. Close-quarters brawler Jedrek Tyler can become Mephistopheles, a flaming horned demon that wields a magical sword. Brad Burrell, a heavy archer, transforms into Fenrir, a white wolf adorned with glowing chains. 'Awakened' forms offer various buffs and upgrades, such as quicker and more powerful attacks as well as other supplementary abilities. The transformation is temporary and there is a significant cooldown on the ability, so choosing the right moment in the flow of battle to use it is crucial.

The studio clearly hopes the game will be adopted as a competitive eSport. While fights are far scrappier and more riotous than most of the fighting games you'll see at an EVO tournament, the game does accommodate higher-level play techniques such as dodge attacks, dash cancels and those tag combos. Likewise, its monetisation model focuses on character access and customisation, rather than balance-spoiling upgrades. The first character is free forever and, as in *League Of Legends*, each week two additional characters are made available for everyone to try out in a free rotation.

As the free-to-play style guide dictates, the game uses two currencies, one accrued through play and the other bought with real-world money. It's possible to buy access to new characters with either type, although the cost of each successive purchase is cranked up dramatically if you stick to the in-game currency. Elsewhere, Bandai Namco is clearly hoping that the game will inspire players to customise their characters, with a heaving assortment of costume items such as jewellery, hats, bandages, alternate colour schemes and accessories offered up for purchase via hard cash.

Rise Of Incarnates has already drawn a sizeable crowd of players, some no doubt intrigued by the novelty. But, for many of them, connection issues and crashes have characterised the game's early weeks. Such issues may prove calamitous for a title that, when you do manage to connect, offers breezy and straightforward, if slightly unrefined and chaotic, brawling. It is its maker's most successful free-to-play endeavour to date, even if that is to damn it with faint praise.



RIGHT Different characters cost a different amount of stock lives to resurrect on the battlefield – one of the ways in which the designers balance teams to ensure no one combination is overpowered.

MAIN It's possible to recover in the air when knocked back by a powerful attack, unless your opponent manages to send you into an arcing spin, in which case you are forced to take the fall.

BOTTOM You can affect slight modifications to your character via the skill grid, into which you slot shapes that offer boosts to reload speed, damage and your life meter



ABOVE Even with a relatively small character roster, the range of potential team combinations is truly vast. The variety of forms, special attacks and abilities offers lots of opportunities to complement your partner's playstyle

Yatagarasu: Attack On Cataclysm

Bit of a mouthful, isn't it? Even without its subtitle, *Yatagarasu* is still too much of a tongue-twister, but fret not, we'd like to propose an alternative. How about *Fourth Strike*? The three-person dev team may be composed of former *SNK* staff who built careers by working on the *King Of Fighters* series — and some of its features, like super jumps and short hops, feature here — but it's a Capcom game to which *Yatagarasu* owes by far the greater debt. So great, in fact, that at times it feels more like a spiritual successor to *Street Fighter III: Third Strike* than a brand-new game.

To be clear, that's no bad thing. At times it can be brazen in its magpieing, but there is evidence here of PDW Hotapen seeking to build on, to improve, rather than simply to copy. Take, for instance, *Third Strike*'s much-loved defining mechanic: the parry. It has been revived here, its input split from stick motion to button press and divided in two. Back in 1999, Capcom simply asked that you nudge the joystick towards an opponent at the moment you were about to get hit, which would cause you to deflect any kind of attack so long as you got the timing right. Here, you have to hit one of two buttons depending on whether you think the incoming fist or foot is going to hit high or low.

For all the magic of *Third Strike*'s parry, it could be a little brainless at times, and gave the attacker only one way to counter it: not attacking when your opponent expected you to, whether by delaying your input, going for a throw, or just doing nothing. Now you can mix things up, aiming high when expectation dictates you will be hitting low, or vice versa. It's a logical evolution of, and a fitting tribute to, a classic mechanic, affording the same dramatic swings in momentum but requiring more effort and guesswork — sometimes educated, sometimes not — from the defending player.

Similar thought has been put into supers, here dubbed Assassin Arts. While *Yatagarasu* fighters only have two such moves apiece (in *Third Strike*, some had three), you take both into battle instead of picking one at the character select screen. The choice you make is which one to 'reinforce', increasing its damage output by 20 per cent and retaining the other option as backup. It's a clever decision, since Assassin Arts are, like most fighting game super combos, situational — one might go through fireballs, the other useful against jumping opponents — and giving the player just one option has always felt a little restrictive. *Yatagarasu*'s way is, by contrast, empowering.

Not everything has been quite so thoughtfully handled. *Third Strike*'s Universal Overhead, for instance — a short hopping attack available to the entire cast that passes over low blows and hits high — has been brought over unchanged. Yet despite this apparent lack of imagination, it is arguably even more important here than it was in Capcom's game. You still can't combo

Publisher Nyu Media
Developer PDW Hotapen
Format PC
Release out now

It is a game of reads and reactions, not complex combo strings; it has a high skill ceiling, but it is skill born of the mind



from it, but it's another way of keeping the opponent guessing, easily performed and useful for closing space, escaping pressure or simply getting a quick dig in to finish a round. For the latter, there's another two-button attack that, while a little slow to start up, is unblockable. It, too, has no combo potential, but is another easy-to-use tool designed to keep your opponent on their toes.

Much of Hotapen's work with *Yatagarasu* seems to be built on a single foundational principle: giving you a broad set of tools and focusing on the psychology of the fighting game over its technicality. It is a game of reads and reactions, not complex combo strings; it has a high skill ceiling, but it is skill born of the mind first and the fingers second. Its most complex input is a tap of a punch or kick button, which, when pressed on the first frame after an opponent's attack hits you, will reduce the damage received by five per cent. It would be vital in a tournament setting, certainly, but is easily and safely ignored by mere mortals.

To be clear, however, this is not a dumbed-down fighting game aimed at beginners. You'll still need your basic skills — your stick motions, the ability to cancel normal attacks into specials and specials into supers — but the contemporary fighting game is about so much more than that, be it *Street Fighter IV*'s one-frame links or *Killer Instinct*'s 100-hit combos. The cast plays to familiar archetypes, often extremely so. Kou, with his fireball, flaming uppercut and aerial spinning kick, shares more than a three-letter name with Ken Masters. Jet is a white, blond-haired Dudley, borrowing many of the gentlemanly boxer's moves and even combo setups. Juzumaru, with his Rekka-ken punch strings, is a close relation to Fei Long; Kotaro pinches airborne dagger throws from Ibuki; and a creepy, blank facemask can't disguise the burly Chadha's obvious debt to Zangief.

This is no great surprise given that *Yatagarasu* is inspired by the fighting game's first heyday in the 1990s, and its developers cut their teeth at a company that started out in the genre by lifting mechanics and movesets almost wholesale from Capcom's games. Yet while it is obvious from the minute you lay eyes on it — never mind sit down to play it — that *Yatagarasu* is rooted firmly in gaming's past, it is precisely that old-fashioned spirit that makes it feel so fresh today. Perhaps it was conceived simply as a game by *Third Strike* fans for *Third Strike* fans, but at a time when 2D fighting games have become so defined by the height of their technical skill ceilings, it feels like something of a statement. It might not be as easy on the eye as its 2015 contemporaries, but it's an awful lot more honest, a celebration of the same basic psychology — high or low, left or right, block or throw — that originally catapulted its genre into the mainstream.



FAR LEFT Commentators can be supportive, but also rather snide when you make a mistake. As well as the famous faces, you can call in support from any character in the game, or just switch the feature off.

LEFT As the leftmost name on the character select screen, Azure may seem like the Ryu equivalent, but beginner players are better advised to pick the Ken-like Kou or his palette swap, Crow



ABOVE While many backgrounds recall the lush pixel work of SNK's 1990s fighting games, others are disappointing. One fast-painted rocky backdrop looks like it was knocked up in ten minutes.

RIGHT Chadha is an obvious riff on Zangief, though there are elements of *Third Strike*'s Hugo to him too. His piledriver, meanwhile, can also be performed in the air, fondly recalling weird *SFII* romhacks found in dodgy 1990s arcades



Fallout Shelter

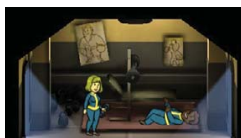
There's a single moment of joy in *Fallout Shelter*. It comes right at the beginning, having freshly installed the game, when you relish the prospect of designing and maintaining your very own bunker. Give it a day or two, however, and you'll feel like walking out into the wilderness and never returning.

The initial rush of inhabitants, bottle caps and reward-stuffed lunch boxes will slow the waning of that initial smile, but pretty soon *Fallout Shelter* reveals itself to be little more than a reskinned *Tiny Tower*, and a particularly incessant one at that. Starting with a vault door, a lift shaft and some basic living quarters, you must expand your compound while maintaining the happiness and health of those in your care.

Having enough to eat and drink, as well as not being irradiated, are all sources of cheer for dwellers, but they also prefer roles that suit their SPECIAL stat makeup. Someone with a high Agility rating is well-suited to working in the cafeteria, for example, while those full of Charisma are best assigned to a radio studio. The latter attribute also affects how quickly a couple are likely to procreate when placed in living quarters together – one of a handful of ways to increase the population of your shelter, and unlock new room types.

You'll spend a lot of time tapping on rooms and people, but there's little else to do. While there are some familiar visual notes, it's just wallpaper over the default free-to-play spreadsheet tripe that plagues the App Store

Publisher Bethesda Softworks
Developer In-house
 (Bethesda Game Studios)
Format iOS
Release Out now



ARRANGING ROOMS

Up to three rooms can be joined together to form larger, more efficient versions – and doing so also provides a discount over upgrading them individually. There are some fun details to spot when you zoom in, but there's not enough personality to go around. There are only a few visual differences between the upgrade states, and once you have four or five power stations that look identical, all hope of expressing yourself via the complex is shattered.

With only a few charges in your care, the brittle illusion of personality is maintained, but as soon as the population starts to spiral, you'll quickly forget any affection and view everyone as a resource. Admittedly, so did Vault-Tec, but here people are dully reduced to a means to fill meters, and you'll regularly be pestered to dip in and tap rooms in order to keep power, water, food and meds topped up. *Fallout Shelter*'s one innovation within F2P convention seems to be that you can rush a room for free and chance disaster for the payoff of near-instant production. Fail, however, and you'll have to deal with a fire or, illogically, a Radroach infestation.

There are also raiders to deal with, who'll need to be quickly struck down because production ceases during an attack. While squishy at first, all violent threats escalate quickly, soon needing bullet after bullet before they'll fall. These encounters were a good opportunity to introduce some gameplay into *Fallout Shelter*, but your influence only goes as far as arming dwellers and moving them to the room they need to defend.

Ironically, sending dwellers out into the wasteland is the most entertaining the game gets, if only for the haul of goodies and the logs that document their adventures. The wait for them to return is less thrilling, but it says much that reading those logs will make you pine to be out there with those brave few who can venture beyond the administrative purgatory of the vault.

5



Tembo The Badass Elephant

Let's address the elephant in the room: Tembo, your game isn't very good. The problem isn't visual, the art style oozing a quirky '90s 'tude. And if you have to build a platforming moveset by pilfering from animal mascots, you could do worse than to borrow Yoshi's flutter jump and ground pound, or Sonic's dash from *Rush* and his ability to curl into a ball of destruction. But mixing both? That's an identity crisis right there.

Split between its natures, *Tembo The Badass Elephant* can't decide what it wants to be, either. A combo meter for chaining kills and smashed objects suggests you ought to run these levels at speed, but then enemies and structures are spaced too far apart to keep a combo going. Early on, enemies' attacks become timed exactly to make you slow down or suffer, but then come in such types and volumes that you can't always afford to be patient. Finally, the critical path is greased for Tembo's quicker moves, but you can only unlock later levels by clearing out a high percentage of nondescript evil-doers PHANTOM (whose aim seems to be to promote the colour purple), enforcing patient backtracking.

Or, rather, plodding backtracking: when he's not charging, Tembo handles with all the weight and none of the grace of a real elephant. The control scheme is

Tembo's backdrops are wondrous, and its star is full of expressive touches. One particularly fine moment is when you return to life, the militarised elephant downing a jar of peanut butter to give him strength to continue

Publisher Sega
Developer Game Freak
Format PC (version tested), PS4, Xbox One
Release Out now



TRUNK CALL

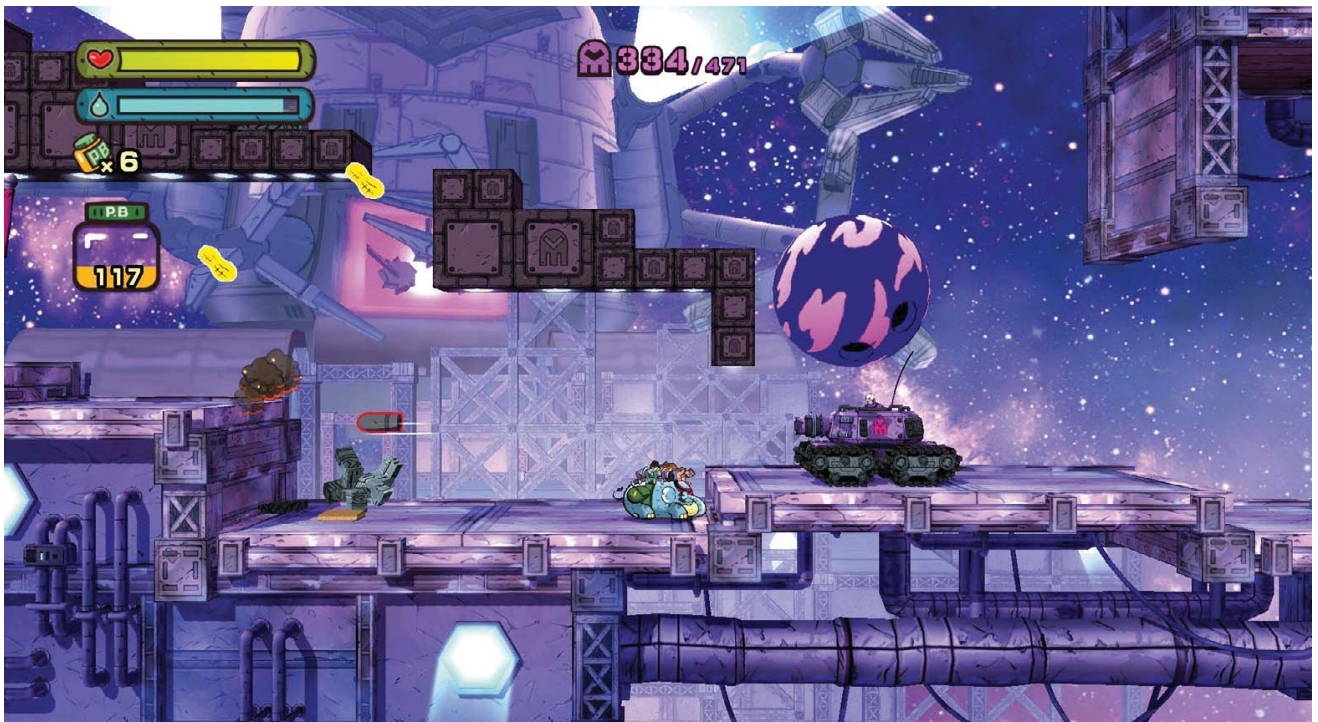
The part of his moveset Tembo can most call his own is the ability to spray water from his nostrils. It's put to predictable use in an early burning building, but the second clutch of levels has him turning floating seeds into platforms by watering them. Again, a fine idea is undone by poor controls. You hold down the right bumper to start the flow, and then the stick used for movement also directs his hose-like schnoz up and down – overly cumbersome when the right stick is fallow.

clunky too. Why, when you have face buttons free, would you bind the bouncing ball smash performed from the air to the same input as the ground dash? Given how fussy the game is about landings, it makes attempts to transition from jumps into dashes a lottery.

But a stop-start rhythm would be easier to endure if the level and enemy designs weren't graduates of the sadist's school of platforming, punishing you for using your moves as often as not. That ball smash-cum-spin attack is the worst culprit, at first seeming like a good way to enter fights, but bouncing you into the air and into projectiles. It's also a liability for platforming, too unpredictable to use except when telegraphed, and capable of smashing through crumbling platforms, which is galling when you need to get a move on but have to leave a pause to ensure you land properly first.

Where *Tembo* finds any traction is in the only thing it seems clear on: big, dumb destruction. It's here Game Freak feels able to have some fun with its comic-book premise, perhaps using a giant bowling ball to mow down grunts, or wrecking pillars to reshape a puzzle room. If Tembo is ever let out of his paddock again, the studio would do well to refocus on his daftest moments of fluid action-cinema carnage. As it is, he's left to star in one of the most ungainly platformers of recent years, a clumsy reminder of 1990s excesses rather than a tribute to the 16bit golden age.

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Enslaved: Odyssey To The West



Monkey magic: how born storytellers
expertly updated a literary classic

By CHRIS SCHILLING

Publisher Namco Bandai Games **Developer** Ninja Theory **Format** 360, PC, PS3 **Release** 2010

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No, it's nothing like the book. *Enslaved* may be based on a piece of classic Chinese literature (Wu Cheng'en's *Journey To The West*) but it takes substantial liberties with the source material. Rather, the original text serves as a starting point for a very different kind of adventure — one that, five years on, might sound familiar. Stop us if you've played this one before: a taciturn, world-weary man reluctantly escorts a smart but naïve young woman across a ruined America. Pockets of human survivors eke out a miserable existence in this overgrown world, no longer the planet's dominant species. The pair's westward journey brings moments of tragedy and hope, as an uneasy alliance steadily blossoms into something more meaningful, before an ending that hangs upon a choice between living a blissful lie or confronting a horrifying truth.

To return to *Enslaved* after playing *The Last Of Us* is to be shocked at how many similarities there are between the two. Both feature strangely beautiful future dystopias; both deliberately subvert the traditional pioneer's journey across America; both feature odd-couple central relationships that endeavour to sidestep cliché (and mostly succeed). More pertinently, both display a rare commitment to ludonarrative consistency. Here are worlds that have been meticulously thought through, where every part is congruous to an internal logic.

Almost immediately, you can see the benefit of having your writer and lead actor involved from the start. After a whirlwind opening set-piece, scribe Alex Garland (*The Beach*, *28 Days Later*, *Ex Machina*) establishes the setup with admirable economy: tech-savvy Trip frees herself from a slave ship, leaving via its final escape pod, before placing an electronic headband on fellow survivor and playable protagonist Monkey while he recovers from the crash. This device, as he learns in painful fashion, forces him to do as she says. Your mission is detailed in a single line: "Get me back to my home, and you can go back to yours."

There's a plausible narrative excuse for ensuring your partner's safety, too: we learn

that the headband is tracking Trip's own biometrics, and will deliver a lethal jolt to Monkey should her heart stop beating. "If I die, you die," she says, simply. So in a single cutscene, we have our motivations for both joining Trip and keeping her alive. It's abundantly clear that Garland not only plays games but understands that players have limited patience for this sort of thing. Few story-led games cut to the chase this quickly, but then few story-led games involve the writer from the beginning. *Enslaved* offers evidence for the case that it's better to knock the story into shape while building the game than it is once most of the work has already been done.

***Enslaved* maintains this** snappy pacing throughout its opening hours. Trip's skills as a hacker provide a credible reason for a HUD that allows the player to see Monkey's health bar and his shield, as well as Trip's vital signs. Soon afterward, you're tasked with catching a dragonfly mech that Trip then presses into service as a remote camera, swooping over environments to scan them in advance for hazards and enemies. Thus the game excuses the visual overlays that highlight the detection radii of dormant mechs in the area, as well as the sensor triggers for mines, and waypoints that mark your immediate destination.

Indeed, the sequence leading to its capture serves both useful narrative and mechanical purposes. It's an engaging bit of simple parkour that develops the central relationship, starting to defuse the hostility caused by Trip's coercion and to build a rapport between the leads, while also injecting some necessary levity. Nitin Sawhney's versatile soundtrack, meanwhile, adopts a whimsical, light-hearted tone as Monkey grows frustrated by the elusive bug.

Elsewhere, the first mech encounter highlights both Trip's vulnerability and Monkey's awareness of the dangerous world outside the gated enclaves of the remaining human population. Trip can set off an EMP to temporarily disable the robots that attack her, or create an electronic decoy as a temporary distraction, but Monkey's the only one strong enough to dismantle them. This leads to a neat reversal of the master-slave relationship: in Monkey's domain, it's as important that Trip listen to him as he ►



to her, so explaining a radial command menu that lets Monkey tell Trip when to move and when to stay put. In a game assembled so intelligently, it's a pity developer Ninja Theory doesn't always credit its players with similar smarts. When Trip squeals and struggles to cling on after Monkey's thrown over a gap, it's obvious we need to quickly leap across and pull her up, though a text prompt pops up to spell it out. It's the game's most vexing trait.

Still, Garland's influence is immediately apparent — as, too, is that of Andy Serkis. Whatever it is that allows Serkis to tap so expertly into a simian mindset, it's powerfully evident here. Broad-shouldered and hunched, cloth 'tail' dangling from his belt, Monkey is clearly strong enough to beat seven shades of steel from mechanoid opponents, yet he's also athletic enough to



turret trained on your position or the fact that Trip's in imminent danger

The same applies to combat. The ferocity with which Monkey smashes mechs to pieces is explained in one terse line — "My parents were killed by a mech attack when I was a kid" — and if his moveset initially seems worryingly simple, it expands over time, his staff doubling as a melee and projectile weapon. Ninja Theory

The camera regularly shifts to point you in the right direction, though it pays to ignore it — hidden masks and orbs that upgrade Monkey's abilities usually lie away from the suggested route

GARLAND'S DIALOGUE IS MORE THAN UP TO METAPHORICAL HEAVY LIFTING, AND MONKEY DOES THE PHYSICAL EQUIVALENT

swing easily between poles and vines. And that's before you see him move. He scampers up handholds with disarming speed, and has possibly the most satisfying ladder-climbing animation yet committed to a game disc, nimbly skipping several rungs to reach the top in an instant.

Many saw the game's sticky platforming as a flaw, but it's consistent with the character. Monkey's no Nathan Drake, no boulderer scrabbling desperately across conveniently crumbling rock faces. Sure, he suffers a small handful of scripted falls, but not one is his fault: under your command he's a capable — nay, fearless — climber. It wouldn't make much narrative sense if he was constantly struggling to retain his grip, even if this rather limits the sensation of immediate peril. Happily, there's often a good reason for making haste, whether it's a

would develop more malleable and responsive combat systems for *DmC: Devil May Cry*, but there's a thrillingly primal satisfaction to the way Monkey wields his staff. As he prepares for battle, he's a coiled spring; suddenly, that internalised rage bursts forth in every blow, accompanied by rumble feedback in the controller and a loud metallic clank. What it lacks in subtlety, it compensates for in sheer audiovisual force, heightened by slow-mo finishing moves as Monkey lets out a cathartic roar.

Nonetheless, Ninja Theory seems aware that perhaps neither the combat nor the platforming would stand up to longterm scrutiny. Thankfully, neither really has to. Light-but-engaging environmental puzzles present a welcome change of pace: a sequence where Monkey unfurls the sails of a windmill is an undoubted highlight. Later,

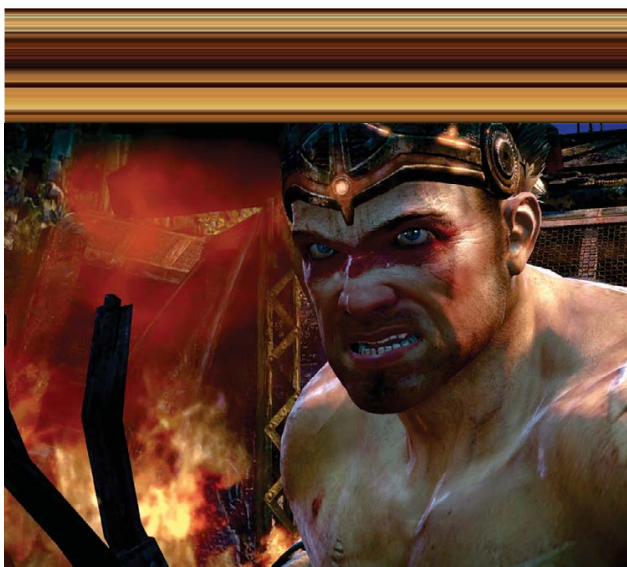


Though the game can't always skirt cliché, Garland has a habit of spiking expectations. An intact fish tank appears to be leading to a 'life finds a way' message, before this closed ecosystem is crudely smashed open by the fists of a mech



CLOUD GAMING

One element retained from Journey To The West is Monkey's Cloud, though rather than allowing him to leap great distances, here it's a circular hoverboard that comes to life with a bassy, electronic whoosh. Used initially to cross stretches of water poisoned by oil, it comes in handy during later sections, allowing Monkey to quickly evade charging dog mechs, or to keep up with a rampaging rhino bot in a linear chase sequence, with blue collectables boosting its speed. Trip quickly divines a scientific rationale for its idiosyncrasies, citing the presence of local static charges that might trigger it. Monkey's explanation is rather more straightforward. "Like I said," he deadpans, "it works in some places, not in others."



Enslaved's performance capture means its animation remains both expressive and surprisingly subtle. It still does some things better than modern games, too: the dead eyes of Kevin Spacey's doppelganger in *Advanced Warfare* aren't even close to these digital peepers

an ostensibly straightforward climbing section is refashioned into a surprisingly challenging race. If some co-operative lever-pulling sequences feel contrived in their arrangement and one or two ideas repeat themselves in the second half, there's usually a fresh context in each case – and even if not, Garland's dialogue is more than up to the metaphorical heavy lifting, while Monkey does the physical equivalent.

And when the pace does slacken, and *Enslaved* can't quite give us something new to keep our thumbs occupied, it usually finds a way to keep our eyes glued to the screen. When the camera's not pointing you in the right direction, it's providing artful framing for some exceptional environment design, proof that post-apocalyptic themes

needn't result in palettes formed exclusively of greys, browns and sickly yellows. You get to climb twisted structures of rusted steel, intertwined with flourishing red and green flora. You can explore a mech graveyard, bounding over what looks like modernist sculpture, but at second glance appears to be a gigantic spinal column. If this is what the world looks like when nature and machinery have claimed co-ownership, perhaps we should leave them to it.

You get to cover a lot of ground in a relatively short time – such that by the time you reach your destination, a mere eight or so hours after the game began, it really feels like you've been on a journey.

It added up to positive reviews but, by most accepted metrics, a flop. A high-concept contemporary sci-fi title based on a literary classic from 16th-century China always felt like a tough sell, and so it proved. And yet its cultural legacy may well resonate longer than its limited initial impact. There are clear signs here of the design thrift that will serve *Ninja Theory* well in the forthcoming *Hellblade* – a blockbuster on a relative shoestring. And for all that *Enslaved* borrows from the *Uncharted* series, it's clear now that Naughty Dog owes *Ninja Theory* a debt in return. But then the notion of sharing ideas is rooted in a classic allegorical yarn that espouses the virtues of collaboration and mutual understanding – yes, that original Journey To The West. Who said it's nothing like the book? ■



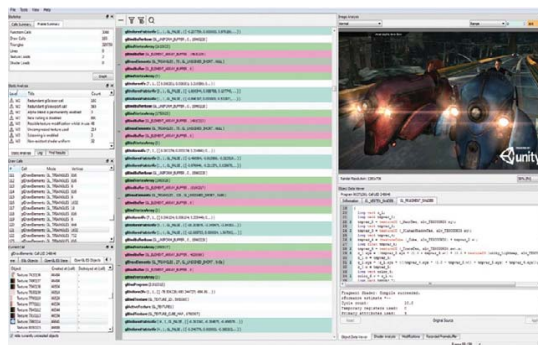
Bringing Imagination to game graphics

Supercharge game development with Imagination Technologies' free PowerVR tools

When graphics go wrong, you need the best tools by your side. When they're free to download, all the better. Imagination Technologies' PowerVR tools make up a suite of essentials for embedded systems development, designed to save time creating and debugging OpenGL ES applications regardless of whether you're dealing with a middleware solution like Unreal or rolling your own in-house code.

Imagination's tools are designed for all stages of development, and make diving into your rendering engine's API calls, shaders and buffers a far less arduous process. In addition, the tools require no code-level changes, which means that you don't have to worry about custom debug builds for investigations – any binary will suffice.

Up first is PVRTrace, Imagination's OpenGL ES capture and analysis tool. With it, you get a set of recording libraries that sit between your application and the host OpenGL ES driver, a GUI-based tool for analysing the recordings once gathered, and an on-device playback tool. Data in hand, you can use PVRTrace to inspect the API calls and data contained, as well as visualise framebuffer attachments (colour, depth and stencil data), and render a pie chart displaying where GPU cycles are being spent. It'll also analyse your API calls and look for ways to improve performance. All of these features are available from within an easy-to-use environment, offering features such as a widget for playing back entire frames, ranges of draw calls or individual draws. The frame scrubber in the bottom-right corner of PVRTrace allows you to step or jump between recorded frames, with a drop-down for switching from normal rendering to basic wireframe, and special viewing



You're never left on your own: Imagination's support is available to all

Imagination's OpenGL ES capture and analysis tool, PVRTrace, at work

modes such as PowerVR Depth Complexity, which estimates the GPU's hidden-surface removal, and a pixel heatmap for instantly seeing which shaders are proving the most costly.

PVRTune picks up from there as the PowerVR GPU performance analysis tool, its job being to pull the GPU performance metrics from the driver and visualise the data. Immediate issues are caught with GPU task timing data (vertex, fragment and compute), with high-level and low-level GPU, CPU and memory counters provided for in-depth analysis – for example, understanding the load of specific hardware blocks responsible for tasks such as shader execution and Hidden Surface Removal (HSR) overdraw reduction. Naturally, everything is provided in real time, providing fine-grain performance data to drill into at will.

Next comes PVRShaderEditor, intended as a lightweight but powerful tool for developing optimised shaders for PowerVR GPUs. Key features include

INTRODUCING POWERVR
The PowerVR toolset and SDK are the perfect companion for embedded graphics development, enabling visually engaging apps and devices for gaming, entertainment, lifestyle, media and creativity. The SDK offers a crossplatform OS and API abstraction layer for 3D graphics application development, along with a library of helper tools for maths and resource loading, and optimised examples to show you exactly how to implement common effects on PowerVR based GPUs. Visit powervrinsider.com for downloads, videos, access to official forums, and reams of documentation on getting started with Imagination's technology and tools.

GLSL ES syntax highlighting, per-line cycle count estimates, and simulated performance estimates – with specific compilers for all PowerVR architectures. Additionally, the tool generates realtime instruction disassembly when PowerVR Rogue compilers are active, enabling you to see exactly how your shader will be executed by the GPU. This makes it easy to get a feel for how your new shaders will work, without having to have actual devices on hand.

Imagination offers comprehensive documentation for each component, including basic text and video guides for every tool, dedicated user manuals and quick starts, and architecture guides covering deeper information such as supported extensions and performance recommendations. You can also find several related blog articles, ranging from how to capture an individual render to using regular expression searches in PVRTrace.

Imagination's tools are crossplatform, requiring a minimum of Windows Vista, Mac OS X 10.8 or, on Linux, Ubuntu 12.04. Other tools available include PVRTextureTool for texture compression, PVRGeoPOD for exporting 3D scenes to the PowerVR Object Data optimised format, shader composer PVRShaman, and PVRMonitor, an on-device hardware profiling tool for Android that allows rapid visibility of performance fluctuations at the highest frame rates. The suite is available to download now from powervrinsider.com.

While the tools are designed to be easy to use, you're never left on your own: support from Imagination is available to all, with a forum for posing questions, a confidential ticketing system for more specific queries, and even the ability to request personal assistance. ■



JAMES LEACH

Postcards From The Clipping Plane

Conveniently ignoring the serious side of videogame development

At an indie developer, I was recently treated to this description of a new game: "It's a war against unknown extremists. You get to kill truckloads of them." That made me rather uneasy – an opinion I carefully shared with them. "Just think of the enemy as Nazis, but in a modern setting," they replied. This didn't help a great deal.

It's all a bit scary. Yes, precedents have been set, but unlike aliens or Nazis, these are people we're talking about. Anyway, moral stances are all well and good, but the developers are prepared to pay, so on we go. I argue the evil empire must have some clear aims, which can't be like any seen before. Not only does this give a reason to go to war with them, but we can cite these outlandish aims in our defence if we run into trouble. The notion that the team likes the most is of the evil force manufacturing a new synthetic drug that will enslave their people and, owing to its moreish qualities, will spread round the world, earning them some decent bank. It's all far enough from poppies to make everyone feel safe.

A recording session is booked for the bulk of the dialogue, which the team fondly and incorrectly believe isn't going to change. A trio of voice artists are procured and there's a line run-through. The voice guys are utterly unfazed by their immediate assumption that the enemy are the ones that crop up in the news every day, of course. I implore them not to default to Middle Eastern accents, but they can't seem to shake this. In desperation, I get them to try the clipped tones of the Raj, and while this does the trick, it also makes the evil force sound like its soldiers were all educated at public schools in England in the '20s. Ideal.

As is the way with smaller games, it's now aimed at various portable platforms, and the project goes into a little development cycle whereby it's tailored, squashed and otherwise mashed badly to fit. For some reason not fully explained, nobody worries about the quality of anything but the iOS version. It doesn't need to be fully explained – we all know why. During this time, changes are wrought. Out go



It sounds like a bad impression of Swedish people. Nobody is impolite enough to mention chefs, but we're all thinking it

the dune buggies, replaced by pickup trucks with flags. A lot of the dialogue is binned for more shouty versions of repeated phrases. To say the unease is back in my mind is to commit a gross understatement. Where are these ideas coming from? If the game is good, and it sort of is, why would anyone want to relate it to the real world? The answer is, I'm told, that we're not fooling anyone. People, they now tell me, are disappointed if they don't get to see the tanks and trucks and helicopters they expect. And, as if that wasn't bad enough, they also want the shouting. Somebody has had a change of heart.

Back in the studio, the voice people are back and I'm determined to hold out for different accents. For a while, Scottish fits beautifully, but there's a chance this might harm sales north of the border, so it's rejected. Dutch is too Austin Powers and Swedish – one of the voice actors is half Swedish – just sounds like they're doing a bad impression of Swedish people. Nobody is impolite enough to mention chefs, but we're all thinking it.

My work is soon done, and the game comes out. I await the inevitable backlash: the questions asked in the House, the waving placards. There's nothing. It sells quite well, but that's because it's very cheap unless the player wishes to upgrade to nothing-like-Apache helicopters and tanks that are in no sense the M1 Abrams seen on Newsnight. Luckily, the best in-app purchases lie down the safe route of railguns and lasers. Which, it turns out, the US military is developing. Is there no escaping this nightmare?

As is the way of things, the next potential project I've been lined up for is very different again. Alien worms are threatening a city of humans on a faraway planet. It's a tower defence effort with a story attached; no dialogue, just a few chunks of sweet text. But in an email, the developers of this game are adamant about one thing: because the title is targeted at children, it's vital that we aren't seen to foster any animosity towards aliens. It transpires they are worried that if SETI yields contact with another lifeform in the next few decades, we haven't created a generation of people whose instinct is to destroy them for stealing our water and crucial mining stocks of Unbelievium. This isn't political correctness, it's galactic correctness, and it makes for a nice change. The team sends through some artwork and the worms are rearing up with dripping, poisonous teeth. Luckily, there's a squad of humans with silver Kalashnikov-type weaponry firing wildly and defending the freedom of the settlers. I decide not to care.

James Leach is a BAFTA Award-winning freelance writer whose work features in games and on television and radio

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The Thunderjaw is the first of *Horizon Zero Dawn*'s cast of colossal robotic dinosaurs to be revealed. At 80 feet long and 33 feet tall, its body is mounted with five weapons that can be broken loose and used against it in battle

